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STATISTICAL YEARBOOK

OF THE ELECTRIC UTILITY INDUSTRY/1987

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INSTITUTE the association of electric companies

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Organized in 1933 and incorporated in 1970, EEI provides a principal forum where electric utility people exchange information on developments in their business, and maintain liaison between the industry and the Federal government. Its officers act as spokesmen for investor-owned electric utility companies on subjects of national interest.

Since 1933, EEI has been a strong, continuous stimulant to the art of making electricity. A basic objective is the "advancement in the public service of the art of producing, transmitting, and distributing electricity and the promotion of scientific research in such field." EEI ascertains factual information, data and statistics relating to the electric industry, and makes them available to member companies, the public, and government representatives.

STATISTICAL YEARBOOK

OF THE ELECTRIC UTILITY INDUSTRY/1987

Published December 1988/Number 55

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PUBLICATIONS PREPARED BY THE STATISTICS DEPARTMENT

Capacity and Generation of Non-Utility Sources of Energy.
Presents data compiled from electric utility reports and other sources for 1986 and revised 1985 statistics on capacity and electric generation of non-utility producers of energy (cogenerators, small power producers and other non-utility producers). The report contains national data on capacity and generation by year, type of producer and qualifying status; number and size of projects; electric utility receipts from non-utility producers from 1979 through 1986; yearly additions of capacity from 1980 through 1986; type of connection and dispatchability; prime mover; primary energy source; and major industry group. Published annually in the summer. 116p.

Catalogue of Investor-Owned Electric Utility Companies Operating in the United States.
Complete reference of investor-owned electric utility names and addresses, arranged on a state basis according to location of principal office. Holding companies and systems, and jointly-owned companies are cross-referenced with operating subsidiaries. Ranking of companies according to number of ultimate customers is presented. Published annually in the winter. 42p.

Data Tape of Tables Contained in the Statistical Yearbook.
The reel of magnetic tape (standard label, 6250 BPI, EBCDIC) contains 72 files corresponding to all of the tables printed in the hard-copy version of the Statistical Yearbook. Each file is identified by a data set name in the form: TABLEnn. Documentation is provided showing positional layouts of the data elements in each file. The incorporation of this tape into a data base will facilitate the retrieval and manipulation of series dealing with most aspects of the electric utility industry.

Digest of Electric Utility Financial Ratios.
Provides a method of calculation for the predominant ratios used by the industry in analyzing financial reports. Categories of ratios include Earnings and Return; Common Dividend; Coverages, Interest and Preferred Dividend; Balance Sheet; Revenue and Sales; Expense; Tax; Plant; Depreciation; other ratios, such as funds used during construction as percent of earnings and per share, capital expenditures, etc. Prepared by EEI Financial Ratios Subcommittee of the Statistical Committee. 31p.

EEI Pocketbook of Electric Utility Industry Statistics.
A pocket-sized quick reference of national electric utility industry data, some dating from 1902 to the present. Categories include data on installed capacity, generation, capital and finance, sales, revenue, customers, fuels and private and public ownership. Published annually in late fall. 36p.

Electric Power Annual Report.
This report presents historical and projected data concerning the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment in the U.S. as of the end of the year. Power supply data including peak loads, capability to meet loads, kilowatthour requirements, load factors, and comparison between summer and winter seasons are shown on a total industry basis for each of the nine reliability councils and for total contiguous U.S. Also included are orders and shipment information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. electric power systems. Published annually in the summer. 40p.

Floppy Disk Version of EEI Statistical Yearbook.
Contains eighty-six (86) LOTUS 1-2-3 files that print out as close approximations of the tables in the Statistical Yearbook. Filenames are in the form TABLEnn.WK1. Wherever possible, the same number of years have been included as in the printed version of the Statistical Yearbook. The purpose of this version is to make the Yearbook data more accessible and useful in this new machine-readable form. The LOTUS worksheet format facilitates easy extraction and manipulation of data series from the Yearbook tables without re-keying, as well as allowing the options of producing whole tables (or selected parts of them) in hard copy and LOTUS graphics. There are twenty-four table files on the first disk and thirty-one each on the second and third disks. In addition to a "README" file on the first disk, each floppy contains a FILEINFO.WK1 worksheet file with descriptions of each tables's contents, the same data in FILEINFO.PRN form that can be "typed" to the PC screen, and a FILEINFO.COM program with paging, printing, and keyword-finding functions to manipulate the table titles. Available in the winter.

Glossary of Electric Utility Terms.
Defines the principal statistical reporting terms commonly used in the electric utility industry. Since the last revision in 1970 the Glossary has been expanded to include information and terms on Load Management/Rate Design, Nuclear Generation and additional terms on financial and general operations. Prepared by the EEI Glossary of Electric Terms Subcommittee of the Statistical Committee. 56p.

Guidelines for Defining & Classifying Electric Customers by Major Energy Use.
Provides guidelines within the electric utility industry for counting, classifying, and summarizing customers, categorizing sales and revenues by major energy use, and determining average use and average revenue per customer. The report contains definitions as well as the application of the defini-

tions to specific situations and problem areas. Historically, the industry has based its classifications on rate schedules and it is probable that the recommendations in this report are unsuitable for rate analysis. However, the recommendations are offered as a basis for making a more significant market-oriented representation of sales statistics available to the industry, security analysts, and others with interest in electric utilities. 8p.

Post-Summer Electric Power Survey.
Reports results of a scheduled generating additions survey as of July 1, and a summer peak load survey as of September 15. There are listings of actual additions to generating capacity during the first half of the year and of scheduled for the future. Contains first actual regional capability, peak load, and percent capacity margin values for the summer season just completed. NERC's latest ten-year fuel projections are presented in terms of both regional generation from each energy source, and in physical units of coal, oil and gas to be burned for electric generation. Also includes information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. electric utility systems, orders and shipments during the first half and shipment backlogs as of July 1. Published near the end of each year. 40p.

Problems and Limitations of Intercompany Comparisons of Investor-Owned Electric Utilities.
Assists analysts and others who may wish to make industry-wide comparisons of investor-owned electric utilities. The report illustrates some of the main factors that can facilitate valid intercompany differences in performances. The Executive Summary briefly examines some of the more important factors that lead to performance differences between companies. The Discussion Section covers in greater detail many of the factors that can generate invalid and inaccurate comparisons. Prepared by EEI Problems and Limitations Subcommittee of the Statistical Committee. 51p.

Statistical Releases.
Yearly subscription includes: 1) Electric Output, issued weekly for nine geographic divisions and total U.S.; data for latest 52-week period and calendar year to date; latest quarterly data for installed capacity, generation, customers and sales 2) Quarterly Statistical Report, presents latest sources of electricity, including net generation, net imports of electricity, and net amounts available for distribution; customers, sales, and revenues by class of electric service; average use and revenue data 3) Advance Release, issued in summer, includes selected tables that appear later in Statistical Yearbook 4) Statistical Yearbook of the Electric Utility Industry.

Statistical Yearbook of the Electric Utility Industry.
Data compiled from company reports and other sources on operational and financial aspects of the total electric utility industry. Categories include national and state statistics on installed capacity; electric generation and supply; sales, revenue and customers by class of service; investor-owned data are presented for operating and related ratios; fuel use; financial; and general economics series. Prepared under the general guidance of the EEI Statistical Committee. Published annually in the fall. 101p.

Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry.
Fuel data are presented for the United States by state and Census Division, detailed by type of fuel (coal, oil, natural gas and nuclear) for both the Total Electric Utility Industry and the Investor-Owned segment. Heat rate, average Btu content, and cost of fuel per kilowatthour, per million Btu, and per unit consumed are shown for the most recent and four preceding years. Published annually in the fall. 75p.

Order card located in back of book.

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Scope and Coverage

This publication presents data on the electric utility industry, including generation, energy sales, customers and revenues, financial and economic. These data are collected and compiled from various sources as indicated on page 3. In all sections, except the Financial Section, data are presented for Investor-Owned Electric Utilities and the Total Electric Utility Industry. Dissimilarity between the investor-owned and the publicly-owned segments of the electric utility industry would make overall financial data incompatible even if it were available. Therefore, in the Financial Section, data are shown for Investor-Owned Electric Utilities only.

1987 in Review

The installed generating capacity of the electric utility industry at December 31, 1987 was 718,056 megawatts, an increase of 1.5 percent over December 31, 1986.

No. of units added during 1987

Hydro	Conventional Steam	Nuclear Steam	Internal Combustion
2	6	7	1

Statistics on capacity and generation from pumped storage are included in hydroelectric and those for gas turbine are included in conventional steam.

Comparison of the 1987 and 1986 total electric utility industry generation data shows the following:

- Generation of electricity in the United States increased approximately 3.4 percent.
- Generation by oil decreased 13.2 percent and represented 4.6 percent of total generation.
- Generation by hydroelectric power decreased 14.1 percent and natural gas production increased 9.7 percent. Hydroelectric power and natural gas represented 9.7 percent and 10.6 percent, respectively, of total generation.
- Generation by nuclear power plants increased 10.0 percent and represented 17.7 percent of total generation. Generation from coal-fired units increased 5.6 percent and represented 56.9 percent of total generation.

Electric output, representing the total amount of electricity available for distribution, was 3.7 percent higher in 1987 than in 1986. The heat of the summer contributed to the highest weekly electric output to date in the week ending August 8, 1987, showing a record of 60.7 billion kilowatthours.

Energy sales to ultimate customers totalled 2,431 billion kilowatthours, an increase of approximately 3.2 percent over the previous year. Total utility revenues from ultimate customers were $155.5 billion in 1987, an increase of 2.0 percent over the previous year. Revenues increased 3.4 percent and 2.6 percent from residential and commercial customers, respectively, while industrial revenues decreased 0.4 percent due to reduction in fuel costs, introduction of incentive rates, and the impact of the 1986 tax reform act.

The total number of ultimate customers at December 31, 1987 was 104,525,026. Approximately 88.3 percent of this total were residential customers. In 1987 residential customers increased 1.5 percent from 1986. In the last 10 years residential customers have increased 21.6 percent.

For the investor-owned electric utilities the 1987 total electric operating revenues increased 1.5 percent to $129.4 billion. Contributing to the increase in revenues were economic growth and warmer than normal summer weather. Electric operating expenses increased $1.1 billion. The cost of fuel represented 44.3 percent of total operation and maintenance expenses, down from 46.1 percent in 1986. Electric operating income increased 3.1 percent to $27.0 billion. Despite the increase in operating income, earnings per share decrease from $2.81 in 1986 to $2.68 in 1987. Write-offs and cumulative effect of accounting changes contributed to this decrease. Retained earnings reached $50.9 billion, only 3.1 percent increase over the $49.4 billion recorded in 1986.

In 1987 electric plant construction expenditures for the investor-owned electric utilities decreased to $27.0 billion (including nuclear fuel) from $31.0 billion in 1986. Of this 1987 total, $4.6 billion was the allowance for funds used during construction (AFUDC), a non-cash item of current income which is added to the plant account for future collection.

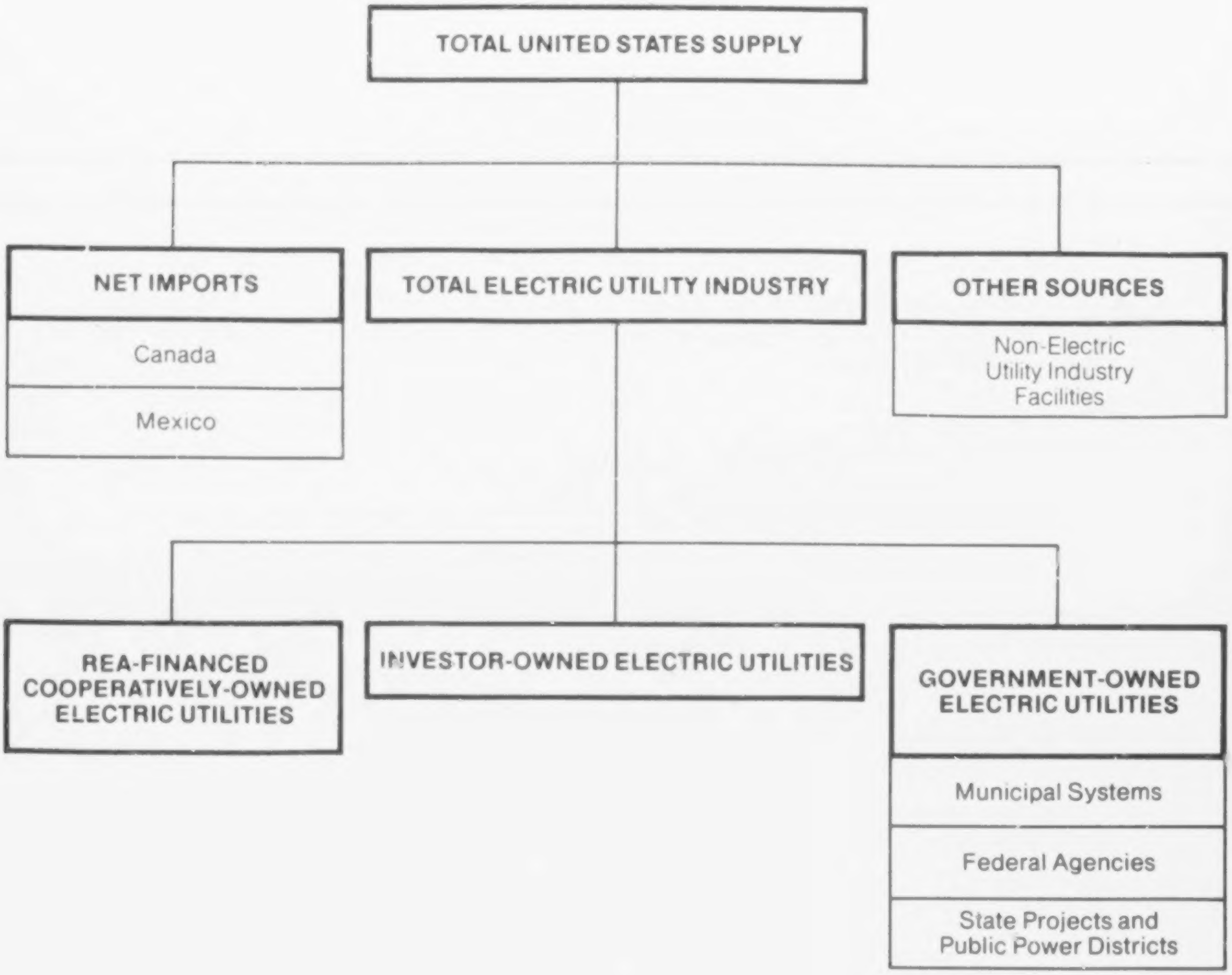
Total interest charges aggregated $13.6 billion up 0.5 percent when compared to 1986. The average interest rate on new long-term debt issued during 1987 was 9.4 percent.

Since 1976 long-term debt as a percentage of total capitalization has gradually declined from 51.9 to 48.2 percent in 1987. Correspondingly, common capital stock equity increased from 35.5 to 43.6 percent by year-end 1987.

The average common stock dividend payout ratio before extraordinary items increased to 73.1 percent in 1987 from 66.0 percent in 1986. The earned return on average common equity before extraordinary items averaged 12.3 percent, down from 13.2 percent in 1986. During 1987, the investor-owned electric utilities were granted an estimated $2.30 billion in rate increases on an annualized basis. This is 20.0 percent below the $2.88 billion granted in 1986. AFUDC as a percentage of net income after preferred dividends and before common dividends was 29.2 percent.

In 1987 the investor-owned electric utilities raised $10.1 billion in new long-term financing, a 15.1 percent decrease from 1986. Of this total, 85.7 percent was long-term debt, 2.4 percent was common stock and the remaining 11.9 percent was preferred stock. Additionally, the industry raised an estimated $1.4 billion in new equity capital as a result of participation by stockholders in dividend reinvestment plans. The new equity capital included not only dividend reinvestment, but also supplementary cash contributions by stockholders.

UNITED STATES SOURCES OF ELECTRIC GENERATION BY TYPE OF OWNERSHIP


TOTAL UNITED STATES SUPPLY
NET IMPORTS
Canada
Mexico
TOTAL ELECTRIC UTILITY INDUSTRY
OTHER SOURCES
Non-Electric Utility Industry Facilities
REA-FINANCED COOPERATIVELY-OWNED ELECTRIC UTILITIES
INVESTOR-OWNED ELECTRIC UTILITIES
GOVERNMENT-OWNED ELECTRIC UTILITIES
Municipal Systems
Federal Agencies
State Projects and Public Power Districts

	Total Electric Utility Industry			
			Increase	
	1987	1986	Amount	Percent
GENERATING CAPACITY – SECTION I (kW in Thousands)				
Installed Name Plate at Beginning of Year	707,684	688,733	18,951	2.8
Added During Year				
Retired During Year				
Net Adjustments*				
Balance at December 31	718,056	707,684	10,372	1.5
ELECTRIC POWER SUPPLY – SECTION II (kW in Thousands)				
Capability at Time of Summer Peak Load (Contiguous U.S.)	648,118	633,291	14,827	2.3
Non-Coincident Summer Peak Load (Contiguous U.S.)	496,185	476,320	19,865	4.2
Capacity Margin (Contiguous U.S.)	23.4%	24.8%		
GENERATION – SECTION III (kWh in Millions)				
Hydro	249,695	290,844	(41,149)	(14.1)
Conventional Steam	1,865,463	1,780,853	84,610	4.8
Nuclear Steam	455,270	414,038	41,232	10.0
Internal Combustion	1,685	1,556	129	8.3
Total Generation	2,572,127**	2,487,310**	84,817	3.4
Received from Industrial Sources	53,832	40,719r	13,113	32.2
Imports from Canada and Mexico	52,219	40,713r	11,506	28.3
Total Energy Input†	2,678,178**	2,568,742**r	109,436	4.3
FUEL – SECTION IV				
Average Cost of Fuel per net kWh	1.84¢	1.92¢	(0.08)¢	(4.2)
Lbs. of Coal per Net kWh Generated	0.981	0.989	(0.008)	(0.8)
Average Btu per Net kWh Generated	10,354	10,423	(69)	(0.7)
ENERGY – SECTION V (BTUs in Quadrillion)				
Annual Production of Energy	64.55p	64.25r	0.30	0.5
Total Energy Supply & Disposition	79.89p	78.31r	1.58	2.0
ENERGY SALES – SECTION VI (kWh in Millions)				
Residential	845,069p	820,015r	25,054	3.1
Commercial	656,708p	628,965r	27,743	4.4
Industrial	842,680p	818,982r	23,698	2.9
Street and Highway Lighting	14,542p	15,037r	(495)	(3.3)
Other	72,192p	71,744r	448	0.6
Total Sales to Ultimate Customers	2,431,192p	2,354,744r	76,448	3.2
Exports to Canada and Mexico	5,881	4,816	1,065	22.1
Energy Accounted for but Not Sold	10,513p	9,783r	730	7.5
Lost and Unaccounted for	230,592p	199,399r	31,193	15.6
Total Disposition of Energy†	2,678,178p	2,568,742r	109,436	4.3
kWh Used per Customer (Average for Year)				
Residential	9,229p	9,090r	139	1.5
Commercial	58,401p	57,161r	1,240	2.2
Total Ultimate Customer	23,453p	23,071r	382	1.7
CUSTOMERS AT YEAR END – SECTION VII (Thousands)				
Residential	92,319p	90,995r	1,324	1.5
Commercial	11,358p	11,114r	244	2.2
Industrial	495p	498r	(3)	(0.6)
Street and Highway Lighting	166p	161r	5	3.1
Other	187p	184r	3	1.6
Total Ultimate Customers	104,525p	102,953r	1,572	1.5
REVENUES – SECTION VIII (Millions of Dollars)				
Residential	$ 62,952p	$ 60,911r	$ 2,041	3.4
Commercial	46,604p	45,410r	1,194	2.6
Industrial	40,725p	40,906r	(181)	(0.4)
Street and Highway Lighting	1,508p	1,498r	10	0.7
Other	3,734p	3,742r	(8)	(0.2)
Total Revenues from Ultimate Customers	$ 155,523p	$ 152,467r	$ 3,056	2.0
Exports to Canada and Mexico	33	14	19	13.57
Total Revenues from Sales of Energy	$ 155,556p	$ 152,481r	$ 3,075	2.0
Average Annual Revenue per Customer:				
Residential	$ 687.49p	$ 675.17r	$ 12.32	1.8
Commercial	$4,144.51p	$4,126.94r	$ 17.57	0.4
Total Ultimate Customers	$1,500.29p	$1,493.81r	$ 6.48	0.4
Average Revenue per kWh:				
Residential	7.45¢p	7.43¢r	0.02¢	0.3
Commercial	7.10¢p	7.22¢r	(0.12)¢	(1.7)
Total Ultimate Customer	6.40¢p	6.47¢r	(0.07)¢	(1.1)
ECONOMICS & OTHER – SECTION X				
Miles of Overhead Electric Line, 22 kV and Above	616,414p	610,585r	5,829	1.0
Employees of Investor-Owned Electric Utilities	523,868	529,664r	(5,796)	(1.1)
Plant Ratio-kWh Generated/kW of Capacity‡	3,608	3,562	46	1.3

Note: Total may not equal sum of components due to independent rounding.

**Represents reclassification in ownership between industrial and electric utility plants and rerating of turbines within the Electric Utility Industry.*

***Total includes generation by wind (1986-4.2 kWh in millions; 1987-3.5 kWh in millions) and generation by solar (1986-14.0 kWh in millions; 1987-10.5 kWh in millions).*

†Excludes industrial for own use. ‡On basis of installed name plate capacity.

p Preliminary. r Revised. ( ) Denotes negative figure.

	Investor-Owned Electric Utilities			
			Increase	
FINANCIAL – SECTION IX (Millions of Dollars)	1987	1986	Amount	Percent
COMBINED BALANCE SHEETS				
ASSETS				
Utility Plant				
Electric	$387,154	$348,400	$38,754	11.1
Other	21,886	21,698	188	0.9
Total Utility Plant	409,039	370,097	38,942	10.5
Accumulated Provision for Depreciation and Amortization	112,029	102,243	9,786	9.6
Net Utility Plant	297,011	267,854	29,157	10.9
Nuclear Fuel	18,440	15,009	3,431	22.9
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	8,697	6,466	2,231	34.5
Net Nuclear Fuel	9,744	8,543	1,201	14.1
Construction Work in Progress	51,510	74,978	(23,468)	(31.3)
Net Total Utility Plant	358,264	351,375	6,889	2.0
Other Property and Investment	15,174	11,887	3,287	27.7
Total Current and Accrued Assets	41,515	38,824	2,691	6.9
Total Deferred Debits	24,916	21,635	3,281	15.2
Total Assets	$439,869	$423,722	$16,147	3.8
CAPITALIZATION AND LIABILITIES				
Capitalization				
Common Capital Stock	$ 53,367	$ 51,658	$ 1,709	3.3
Other Paid-In Capital Excluding Retained Earnings	37,006	37,366	(360)	(1.0)
Retained Earnings	50,904	49,362	1,542	3.1
Total Common Capital Stock Equity	141,277	138,386	2,891	2.1
Preferred Stock	26,661	27,947	(1,286)	(4.6)
Total Long-Term Debt	156,181	153,423	2,753	1.8
Total Capitalization	324,120	319,761	4,359	1.4
Total Other Non-Current Liabilities	6,648	5,102	1,546	30.3
Total Current and Accrued Liabilities	44,715	40,419	4,296	10.6
Total Deferred Credits and Operating Reserves	24,678	22,815	1,863	8.2
Contributions in Aid of Construction	174	160	14	8.8
Deferred Income Taxes	39,535	35,465	4,070	11.5
Total Liabilities	$439,869	$423,722	$16,147	3.8
COMBINED INCOME STATEMENTS				
Operating Revenues – Electric Department	$129,437	$127,552	$ 1,885	1.5
Operating Expenses Including Maintenance	69,997	67,663	2,334	3.4
Depreciation, Depletion and Amortization	12,714	11,165	1,549	13.9
Deferred Expenses	(1,110)	N/A	N/A	N/A
Taxes	20,828	22,534	(1,706)	(7.6)
Total Operating Expenses	102,429	101,360	1,069	1.1
Operating Income	27,008	26,191	817	3.1
Other Income (Non-Operating), Net	4,700	6,648	(1,948)	(29.3)
Other Departments	1,069	1,253	(184)	(14.7)
Income before interest Charges (Gross Income)	32,777	34,093	(1,316)	(3.9)
Total Interest Charges	13,605	13,544	61	0.5
Income before Extraordinary Items	19,172	20,549	(1,377)	(6.7)
Extraordinary Items	(1,127)	(308)	(819)	N/A
Net Income	18,045	20,241	(2,196)	(10.8)
Preferred Dividend Charges	2,306	2,747	(441)	(16.1)
Available for Common Stock	15,739	17,494	(1,755)	(10.0)
Common Dividends	12,668	12,303	365	3.0
Net Income After Dividends	$ 3,071	$ 5,190	$ (2,119)	(4.1)
Electric Utility Financing:				
Long-Term Debt	$ 13,926	$ 21,391	$ (7,465)	(34.9)
Preferred Stock	1,958	1,681	277	16.5
Common Stock	246	640	(394)	(61.6)
Total Capital	$ 16,130	$ 23,711	$ (7,581)	(32.0)
Construction Expenditures				
Production	$ 14,395	$ 18,483	$ (4,088)	(22.1)
Transmission	2,066	1,761	305	17.3
Distribution	7,457	7,248	209	2.9
Other	3,117	3,532	(415)	(11.7)
Total	$ 27,035	$ 31,023	$ (3,988)	(12.9)

Note: Total may not equal sum of components due to independent rounding.

( ) Denotes negative figure.   N/A Not Applicable.

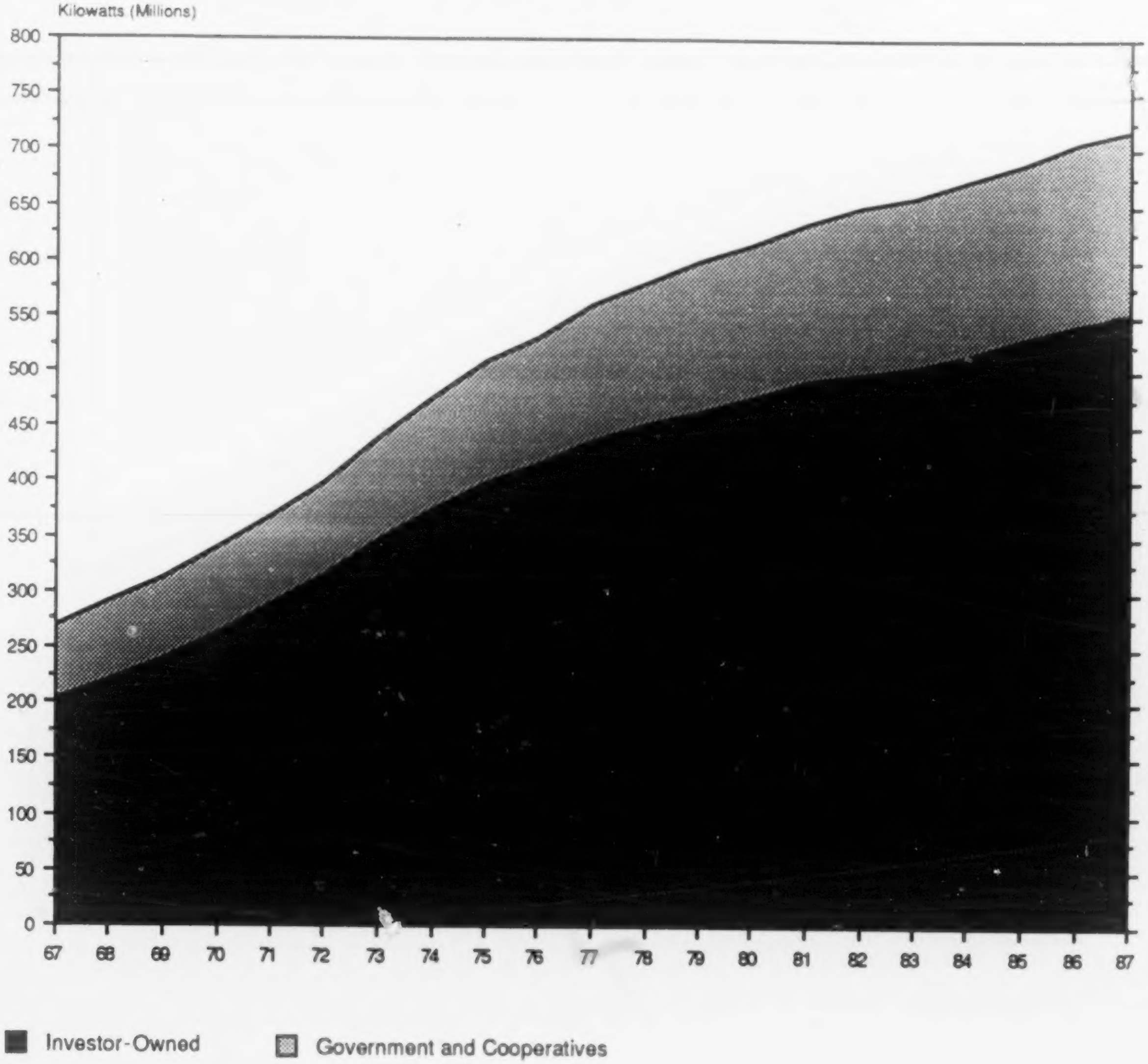
GENERATING CAPACITY

SECTION I

CHART I-A

INSTALLED GENERATING CAPACITY

TOTAL UNITED STATES



Based on Table 1, page 7.
Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 1

INSTALLED GENERATING CAPACITY IN THE UNITED STATES

KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States
1987	**552,795**	**165,261**	**718,056**	**N/A**	**718,056****
1986	544,199	163,485	707,684	25,321r	733,005r
1985	530,405	158,328	688,733	22,920r	711,653r
1984	514,863	157,600	672,462	17,371e	689,833
1983	505,487	152,695	658,182	16,765e	674,947
1982	499,111	150,994	650,105	16,938e	667,043
1981	490,767	144,041	634,808	17,142e	651,950
1980	477,083	136,612	613,695	17,323e	631,018
1979	464,144	134,299	598,443	17,436	615,879
1978	453,647	125,665	579,312	19,391	598,703
1977	438,385	121,976	560,361	19,245	579,606
1976	415,504	115,658	531,162	19,113	550,275
1975	399,036	109,378	508,414	19,177	527,591
1974	376,122	100,046	476,168	19,351	495,519
1973	346,476	93,399	439,875	19,377	459,252
1972	314,353	84,400	398,753	18,768	417,521
1971	288,301	80,779	369,080	19,297	388,377
1970	262,675	78,415	341,090	19,237	360,327
1969	240,078	73,271	313,349	19,257	332,606
1968	220,766	70,292	291,058	19,123	310,181
1967	203,580	65,672	269,252	18,933	288,185

Note: Total may not equal sum of components due to independent rounding.

* *Includes non-electric utility industry facilities.*

** *Excludes Other Sources.*

N/A Not Available.

r Revised. e Estimated.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759), Annual Electric Generator Report (EIA-860), Annual Electric Utility Report (EIA-861), *and Edison Electric Institute.*

TABLE 2

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Total Electric Utility Industry†	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
TOTAL (Capacity of Generators Driven by All Types of Prime Mover)							
1987	**718,056**	**552,795**	**26,359**	**138,902**	**39,378**	**64,666**	**34,858**
1986	707,684	544,199	26,430	137,055	38,584	63,864	34,607
1985	688,733	530,405	24,574	133,754	37,017	63,710	33,027
1984	672,462	514,863	24,738	132,862	36,717	63,304	32,841
1983	658,182	505,487	22,202	130,493	36,598	62,973	30,923
1982	650,105	499,111	21,463	129,530	35,819	62,544	31,168
1981	634,808	490,767	18,406	125,635	35,125	60,982	29,527
1980	613,695	477,083	15,422	121,190	34,598	59,083	27,509
1979	598,443	464,144	13,837	120,462	34,525	58,346	27,591
1978	579,312	453,647	11,635	114,030	34,426	54,282	25,322
1977	560,361	438,385	10,889	111,087	33,291	53,183	24,613
1976	531,162	415,504	9,947	105,711	30,602	51,707	23,402
1975	508,414	399,036	9,136	100,242	28,787	50,133	21,322
1974	476,168	376,122	7,474	92,572	27,324	45,518	19,730
1973	439,875	346,476	7,288	86,111	24,956	44,520	16,635
1972	398,753	314,353	6,704	77,696	23,049	40,408	14,239
1971	369,080	288,301	5,470	75,309	21,992	39,656	13,661
1970	341,090	262,675	5,162	73,253	20,941	38,718	13,594
1969	313,349	240,078	4,318	68,953	20,035	36,130	12,788
1968	291,058	220,766	3,434	66,858	19,429	34,956	12,473
1967	269,252	203,580	3,019	62,653	18,049	33,640	10,964
HYDRO (Capacity of Generators Driven by Water Wheels and Turbines)							
1987	**85,910**	**29,149**	**113**	**56,648**	**5,401**	**38,438**	**12,809**
1986	85,165	28,949	116	56,100	5,952	37,636	12,512
1985	83,015	27,571	104	55,340	5,159	37,631	12,550
1984	80,590	26,127	81	54,382	4,850	37,139	12,393
1983	78,968	24,977	81	53,910	4,781	36,803	12,326
1982	78,128	24,584	81	53,464	4,729	36,378	12,357
1981	77,145	24,319	67	52,759	4,686	35,891	12,182
1980	76,378	24,227	67	52,084	4,692	35,212	12,180
1979	75,351	23,916	67	51,368	4,693	34,495	12,180
1978	71,014	23,847	67	47,100	4,694	30,431	11,975
1977	68,762	23,158	67	45,537	4,431	29,332	11,774
1976	67,757	23,134	67	44,556	4,010	29,031	11,515
1975	65,949	23,115	67	42,767	3,760	27,480	11,527
1974	63,560	22,737	54	40,769	3,814	25,447	11,508
1973	61,782	21,770	56	39,956	3,334	25,582	11,040
1972	56,386	19,122	54	37,210	3,330	24,336	9,544
1971	55,912	19,076	54	36,782	3,260	24,056	9,466
1970	55,056	18,850	56	36,150	3,195	23,499	9,456
1969	52,753	18,444	56	34,253	3,195	22,054	9,004
1968	51,168	18,337	57	32,774	3,177	20,905	8,692
1967	48,112	18,134	57	29,921	2,623	19,589	7,709
CONVENTIONAL STEAM (Capacity of Generators Driven by Steam Engines and Turbines)							
1987	**524,236**	**431,677**	**25,950**	**66,659**	**29,629**	**20,326**	**16,704**
1986	524,136	432,601	25,963	65,571	28,495	20,326	16,750
1985	520,299	433,103	24,098	63,098	27,764	20,177	15,156
1984	516,537	429,047	24,278	63,212	27,788	20,244	15,181
1983	507,136	422,944	21,767	62,424	27,737	20,244	14,444
1982	503,804	420,863	21,011	61,930	27,026	20,246	14,658
1981	491,287	413,571	17,939	59,778	26,199	20,392	13,187
1980	475,276	403,031	14,954	57,291	25,697	20,393	11,201
1979	462,999	392,349	13,375	57,275	25,599	20,378	11,298
1978	449,231	383,024	11,073	55,134	25,511	20,378	9,245
1977	436,426	371,976	10,429	54,021	24,590	20,378	9,053
1976	415,181	355,263	9,061	50,857	22,396	20,355	8,106
1975	397,649	340,907	8,264	48,478	20,843	20,332	7,303
1974	375,940	323,490	7,017	45,433	20,395	18,899	6,139
1973	352,072	303,536	6,836	41,700	18,511	18,917	4,272
1972	322,201	279,129	6,254	36,818	16,895	16,052	3,871
1971	299,996	260,016	5,018	34,962	16,026	15,576	3,360
1970	275,191	236,792	4,761	33,638	15,141	15,194	3,303
1969	252,411	217,196	3,925	31,290	14,291	14,051	2,948
1968	233,095	199,285	3,031	30,779	13,807	14,026	2,946
1967	214,435	182,340	2,608	29,487	13,046	14,026	2,415

See page 9 for footnotes.

Total Electric Utility Industry (1987)—16.5 kW in thousands; Investor-Owned Utilities—12.4 kW in thousands; Municipal Utilities—4.0 kW in thousands.

TABLE 2 (continued)

INSTALLED GENERATING CAPACITY
TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	Total Electric Utility Industry†	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
			NUCLEAR STEAM (Capacity of Generators Driven by Nuclear Reactors)				
1987	**101,604**	**89,450**	**—**	**12,154**	**963**	**5,897**	**5,294**
1986	92,417	80,213	50	12,154	963	5,897	5,294
1985	80,397	68,238	50	12,109	963	5,897	5,249
1984	70,484	58,380	50	12,054	963	5,897	5,194
1983	67,073	56,069	50	10,954	963	5,897	4,094
1982	63,042	52,038	50	10,954	963	5,897	4,094
1981	60,776	50,992	50	9,734	963	4,677	4,094
1980	56,488	47,960	50	8,478	963	3,456	4,059
1979	54,593	46,065	50	8,478	963	3,456	4,059
1978	53,527	44,984	65	8,478	963	3,456	4,059
1977	49,880	41,654	55	8,171	963	3,456	3,752
1976	42,918	35,419	480	7,019	963	2,304	3,752
1975	39,754	33,539	480	5,735	963	2,304	2,468
1974	31,662	28,397	55	3,210	—	1,152	2,058
1973	21,118	19,766	53	1,299	—	—	1,299
1972	15,302	14,449	53	800	—	—	800
1971	8,688	7,833	55	800	—	—	800
1970	6,493	5,693	—	800	—	—	800
1969	3,980	3,180	—	800	—	—	800
1968	2,817	2,017	—	800	—	—	800
1967	2,887	2,087	**	800**	**	—	800
			INTERNAL COMBUSTION (Capacity of Generators Driven by Internal Combustion Engines)				
1987	**6,212**	**2,484**	**296**	**3,432**	**3,381**	**—**	**52**
1986	5,944	2,420	301	3,224	3,171	—	52
1985	5,001	1,477	322	3,202	3,130	*	72
1984	4,841	1,306	330	3,205	3,115	17	73
1983	4,996	1,494	304	3,198	3,117	22	58
1982	5,131	1,627	321	3,182	3,101	22	60
1981	5,600	1,885	351	3,364	3,278	22	65
1980	5,553	1,865	351	3,337	3,246	22	69
1979	5,500	1,814	345	3,341	3,270	17	54
1978	5,540	1,792	430	3,318	3,258	17	43
1977	5,293	1,597	338	3,358	3,307	17	34
1976	5,306	1,688	339	3,279	3,233	17	29
1975	5,062	1,475	325	3,262	3,221	17	24
1974	5,006	1,498	348	3,160	3,115	20	25
1973	4,903	1,404	343	3,156	3,111	21	24
1972	4,864	1,653	343	2,868	2,824	20	24
1971	4,484	1,376	343	2,765	2,706	24	35
1970	4,350	1,340	345	2,665	2,605	25	35
1969	4,205	1,258	337	2,610	2,549	25	36
1968	3,978	1,127	346	2,505	2,445	25	35
1967	3,818	1,019	354	2,445	2,380	25	40

Note: Total may not equal sum of components due to independent rounding.

†*Beginning 1983 wind turbine capacity included in total; Total Electric Utility Industry (1983)—9.3 kW in thousands; Investor-Owned Utilities—2.8 kW in thousands; Federal—6.5 kW in thousands. Total Electric Utility Industry (1984)—9.6 kW in thousands; Investor-Owned Utilities—2.9 kW in thousands; Municipal Utilities—0.1 kW in thousands; Federal—6.6 kW in thousands. Total Electric Utility Industry (1985)—7.4 kW in thousands; Investor-Owned Utilities—3.2 kW in thousands; Municipal Utilities—0.1 kW in thousands; Federal—4.1 kW in thousands. Total Electric Utility Industry (1986)—7.5 kW in thousands; Investor-Owned Utilities—3.3 kW in thousands; Municipal Utilities—0.1 kW in thousands; Federal—4.1 kW in thousands. Total Electric Utility Industry (1987)—26.3 kW in thousands; Investor-Owned Utilities—22.1 kW in thousands; Municipal Utilities—0.1 kW in thousands; Federal—4.1 kW in thousands. Beginning 1984 solar capacity included in total; Total Electric Utility Industry (1984)—1.0 kW in thousands; Municipal Utilities—1.0 kW in thousands. Total Electric Utility Industry (1985)—13.5 kW in thousands; Investor-Owned Utilities—12.5 kW in thousands; Municipal Utilities—1.0 kW in thousands. Total Electric Utility Industry (1986)—14.5 kW in thousands; Investor-Owned Utilities—12.5 kW in thousands; Municipal Utilities—2.0 kW in thousands. Total Electric Utility Industry (1987)—16.5 kW in thousands; Investor-Owned Utilities—12.5 kW in thousands; Municipal Utilities—4.0 kW in thousands.*

* *Less than five hundred kilowatts.*

** *Generator capacity of the following plants is included in Conventional Steam:*
Piqua—Piqua Municipal Power Plant, Ohio
Elk River—Rural Cooperative Power Assoc., Minnesota
Sheldon—Consumer's Public Power District, Nebraska
Parr—South Carolina Electric & Gas Co., South Carolina

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 3

INSTALLED GENERATING CAPACITY
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1986 and 1987—KILOWATTS IN THOUSANDS (NAMEPLATE)

	Total Electric Utility Industry†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
Division/State	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986
Total United States	**718,056**	**707,684**	**85,910**	**85,165**	**524,286**	**524,136**	**101,604**	**92,417**	**6,212**	**5,944**
Maine	2,352	2,391	340	379	1,104	1,104	864	864	44	44
New Hampshire	1,405	1,384	262	241	1,143	1,143	—	—	—	—
Vermont	1,104	1,138	350	368	170	186	563	563	20	20
Massachusetts	10,013	9,992	1,656	1,656	7,280	7,267	863	863	214	206
Rhode Island	273	271	2	2	243	243	—	—	29	26
Connecticut	7,377	7,377	133	133	3,493	3,493	3,425	3,425	326	326
New England	**22,525**	**22,552**	**2,742**	**2,777**	**13,434**	**13,437**	**5,715**	**5,715**	**633**	**623**
New York	33,172	32,305	5,034	5,038	22,797	23,091	5,234	4,068	107	107
New Jersey	14,670	14,554	387	397	10,089	10,089	4,160	4,060	34	8
Pennsylvania	35,941	34,782	1,916	1,917	25,533	25,290	8,418	7,501	74	74
Middle Atlantic	**83,783**	**81,640**	**7,337**	**7,352**	**58,418**	**58,471**	**17,812**	**15,629**	**215**	**189**
Ohio	27,578	28,526	119	119	25,126	26,079	2,215	2,215	117	113
Indiana	21,528	21,535	94	94	21,192	21,199	—	—	242	242
Illinois	35,961	32,524	14	14	22,796	22,794	12,509	9,075	642	642
Michigan	24,094	24,143	2,329	2,329	17,026	17,180	4,387	4,272	352	363
Wisconsin	11,585	11,585	408	409	9,398	9,445	1,583	1,633	196	99
East North Central	**120,745**	**118,313**	**2,964**	**2,964**	**95,538**	**96,696**	**20,694**	**17,195**	**1,549**	**1,458**
Minnesota	9,282	8,495	139	140	7,103	6,322	1,755	1,755	265	278
Iowa	8,574	8,575	130	130	7,461	7,461	597	597	386	387
Missouri	16,557	16,594	1,064	1,064	13,926	13,974	1,236	1,236	331	320
North Dakota	4,684	4,657	517	490	4,141	4,141	—	—	25	25
South Dakota	2,637	2,581	1,683	1,627	893	893	—	—	60	60
Nebraska	5,816	5,948	182	182	4,036	4,173	1,338	1,338	260	256
Kansas	10,485	10,468	2	2	8,682	8,668	1,236	1,238	565	560
West North Central	**58,035**	**57,318**	**3,718**	**3,635**	**46,242**	**45,632**	**6,161**	**6,163**	**1,894**	**1,886**
Delaware	1,900	1,900	—	—	1,892	1,892	—	—	8	8
Maryland	10,457	10,446	531	531	7,790	7,779	1,829	1,829	307	307
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	13,643	13,598	2,983	2,977	6,984	6,944	3,655	3,655	22	23
West Virginia	15,152	15,152	175	175	14,977	14,977	—	—	—	—
North Carolina	20,828	19,834	1,948	1,948	13,751	13,709	5,125	4,174	4	4
South Carolina	16,325	16,325	2,348	2,348	7,177	7,177	6,799	6,799	1	1
Georgia	20,850	19,634	2,430	2,429	15,501	15,501	2,915	1,700	5	5
Florida	35,661	34,896	42	42	31,214	30,447	4,110	4,110	295	297
South Atlantic	**135,684**	**132,655**	**10,458**	**10,451**	**100,153**	**99,293**	**24,433**	**22,267**	**641**	**644**
Kentucky	16,608	16,776	746	746	15,848	16,016	—	—	13	13
Tennessee	18,279	18,266	3,714	3,701	12,124	12,124	2,441	2,441	—	—
Alabama	19,989	20,056	2,857	2,860	11,900	11,963	5,233	5,233	—	—
Mississippi	7,154	7,097	—	—	5,702	5,789	1,373	1,308	79	—
East South Central	**62,030**	**62,195**	**7,317**	**7,307**	**45,574**	**45,892**	**9,046**	**8,982**	**92**	**13**
Arkansas	9,202	9,275	1,086	1,086	6,235	6,308	1,845	1,845	35	36
Louisiana	18,228	18,318	—	—	15,858	15,975	2,236	2,236	134	107
Oklahoma	13,582	13,563	968	968	12,485	12,464	—	—	129	131
Texas	60,029	60,224	599	597	59,253	59,457	—	—	176	170
West South Central	**101,041**	**101,381**	**2,654**	**2,652**	**93,831**	**94,203**	**4,081**	**4,081**	**475**	**445**
Montana	4,867	4,903	2,207	2,220	2,660	2,683	—	—	—	—
Idaho	2,048	2,041	1,991	1,983	50	50	—	—	7	8
Wyoming	5,854	5,854	242	242	5,590	5,590	—	—	18	18
Colorado	7,231	7,265	1,010	999	5,808	5,855	336	336	77	74
New Mexico	5,512	5,542	25	25	5,468	5,491	—	—	19	26
Arizona	15,732	13,680	2,498	1,763	9,155	9,108	4,076	2,806	3	3
Utah	5,087	4,278	223	210	4,777	4,005	—	—	86	63
Nevada	4,831	5,546	729	1,444	4,039	4,039	—	—	62	63
Mountain	**51,161**	**49,108**	**8,924**	**8,886**	**37,547**	**36,821**	**4,412**	**3,142**	**273**	**255**
Washington	24,127	23,739	19,849	19,404	2,213	2,271	2,060	2,060	4	4
Oregon	10,366	10,578	7,873	8,097	1,272	1,260	1,216	1,216	6	6
California	45,405	45,045	11,862	11,429	27,504	27,584	5,974	5,968	47	47
Pacific	**79,897**	**79,363**	**39,584**	**38,930**	**30,989**	**31,116**	**9,250**	**9,244**	**56**	**56**
Alaska	1,672	1,674	209	208	1,200	1,214	—	—	263	251
Hawaii	1,483	1,485	3	3	1,359	1,359	—	—	121	123
Alaska & Hawaii	**3,155**	**3,159**	**212**	**212**	**2,559**	**2,573**	**—**	**—**	**384**	**374**

Note: Total may not equal sum of components due to independent rounding.

†*Total includes wind turbine capacity (1986—7.5 kW in thousands; 1987—26.3 kW in thousands) and solar energy capacity (1986—14.5 kW in thousands; 1987—16.5 kW in thousands).*

Sources: U.S. Department of Energy. Energy Information Administration. Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 4

INSTALLED GENERATING CAPACITY
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1986 and 1987 — KILOWATTS IN THOUSANDS (NAME PLATE)

	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
Division/State	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986
Total United States	**552,795**	**544,199**	**29,149**	**28,949**	**431,677**	**432,601**	**89,450**	**80,213**	**2,484**	**2,420**
Maine	2,349	2,387	340	378	1,104	1,104	864	864	41	41
New Hampshire	1,405	1,384	262	241	1,143	1,143	—	—	—	—
Vermont	1,003	1,036	330	347	92	108	563	563	18	18
Massachusetts	9,098	9,097	1,645	1,645	6,447	6,451	863	863	143	138
Rhode Island	272	269	—	—	243	243	—	—	29	26
Connecticut	7,320	7,320	130	130	3,454	3,454	3,425	3,425	311	311
New England	**21,447**	**21,493**	**2,706**	**2,741**	**12,483**	**12,503**	**5,715**	**5,715**	**542**	**534**
New York	26,120	25,242	909	902	21,838	22,133	3,338	2,172	35	36
New Jersey	14,546	14,456	387	397	9,991	9,991	4,160	4,060	8	8
Pennsylvania	35,941	34,782	1,916	1,917	25,533	25,290	8,418	7,501	74	74
Middle Atlantic	**76,607**	**74,480**	**3,212**	**3,215**	**57,362**	**57,414**	**15,916**	**13,733**	**117**	**118**
Ohio	26,686	27,595	43	48	24,350	25,259	2,215	2,215	74	74
Indiana	20,069	20,071	94	94	19,754	19,756	—	—	221	221
Illinois	34,837	31,362	14	14	21,911	21,871	12,509	9,075	403	403
Michigan	22,519	22,555	2,288	2,288	15,689	15,839	4,387	4,272	154	155
Wisconsin	10,254	10,261	374	374	8,275	8,281	1,583	1,583	23	23
East North Central	**114,365**	**111,843**	**2,817**	**2,817**	**69,980**	**91,007**	**20,694**	**17,144**	**874**	**875**
Minnesota	8,347	7,518	134	134	6,435	5,625	1,755	1,755	4	4
Iowa	7,381	7,387	127	127	6,637	6,637	597	597	21	26
Missouri	11,952	11,985	596	596	10,108	10,140	1,236	1,236	12	12
North Dakota	607	607	—	—	606	606	—	—	*	*
South Dakota	811	811	*	*	758	758	—	—	52	52
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	8,047	8,049	2	2	6,803	6,803	1,236	1,238	6	6
West North Central	**37,144**	**36,355**	**859**	**859**	**31,347**	**30,569**	**4,824**	**4,826**	**95**	**101**
Delaware	1,741	1,741	—	—	1,741	1,741	—	—	—	—
Maryland	10,368	10,358	531	531	7,754	7,743	1,829	1,829	255	255
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	13,398	13,357	2,746	2,745	6,982	6,942	3,655	3,655	16	16
West Virginia	15,152	15,152	175	175	14,977	14,977	—	—	—	—
North Carolina	20,126	19,176	1,481	1,481	13,520	13,520	5,125	4,174	—	—
South Carolina	13,168	13,168	1,845	1,845	4,523	4,523	6,799	6,799	—	—
Georgia	19,289	18,074	886	886	15,484	15,484	2,915	1,700	5	5
Florida	27,800	27,460	*	*	23,657	23,317	4,110	4,110	33	33
South Atlantic	**121,911**	**119,353**	**7,666**	**7,664**	**89,505**	**89,114**	**24,433**	**22,267**	**307**	**307**
Kentucky	7,812	7,980	110	110	7,701	7,869	—	—	—	—
Tennessee	172	172	172	172	—	—	—	—	—	—
Alabama	10,813	10,873	1,583	1,583	7,454	7,514	1,777	1,777	—	—
Mississippi	6,382	6,317	—	—	4,930	5,009	1,373	1,308	79	—
East South Central	**25,178**	**25,341**	**1,865**	**1,865**	**20,086**	**20,392**	**3,149**	**3,085**	**79**	**—**
Arkansas	7,836	7,909	65	65	5,920	5,993	1,845	1,845	6	6
Louisiana	15,300	15,423	—	—	13,012	13,129	2,236	2,236	52	59
Oklahoma	10,331	10,312	—	—	10,306	10,285	—	—	25	27
Texas	49,341	49,577	90	90	49,213	49,449	—	—	38	38
West South Central	**82,808**	**83,222**	**155**	**155**	**78,451**	**78,856**	**4,081**	**4,081**	**121**	**130**
Montana	3,571	3,594	911	911	2,660	2,683	—	—	—	—
Idaho	1,384	1,374	1,329	1,319	50	50	—	—	5	6
Wyoming	3,900	3,900	3	3	3,880	3,880	—	—	18	18
Colorado	3,427	3,551	342	342	2,727	2,853	336	336	23	20
New Mexico	5,094	5,124	—	—	5,078	5,102	—	—	15	22
Arizona	8,052	6,735	7	7	3,966	3,919	4,076	2,806	3	3
Utah	2,786	2,827	63	55	2,723	2,771	—	—	—	—
Nevada	4,111	4,111	9	9	4,039	4,039	—	—	62	63
Mountain	**32,325**	**31,216**	**2,664**	**2,646**	**25,123**	**25,297**	**4,412**	**3,142**	**126**	**131**
Washington	3,198	3,208	982	964	2,213	2,241	—	—	3	3
Oregon	3,968	3,968	1,486	1,486	1,260	1,260	1,216	1,216	6	6
California	32,248	32,123	4,717	4,517	22,473	22,554	5,011	5,005	32	32
Pacific	**39,413**	**39,299**	**7,185**	**6,968**	**25,946**	**26,055**	**6,227**	**6,221**	**40**	**40**
Alaska	114	113	16	16	35	35	—	—	62	62
Hawaii	1,483	1,485	3	3	1,359	1,359	—	—	121	123
Alaska & Hawaii	**1,597**	**1,598**	**20**	**20**	**1,394**	**1,394**	**—**	**—**	**183**	**184**

Note: Total may not equal sum of components due to independent rounding.

†Total includes wind turbine capacity (1986—3.3 kW in thousands; 1987—22.1 kW in thousands) and solar energy capacity (1986—12.5kW in thousands; 1987—12.5 kW in thousands).

**Less than five hundred kilowatts.*

Sources: U.S. Department of Energy. Energy Information Administration. Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 5

CHANGES IN INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY*

BY TYPE OF PRIME MOVER DRIVING THE GENERATOR

1968-1987—KILOWATTS IN THOUSANDS (NAME PLATE)

At December 31st	New Additions	Retirements	Adjustments**		Net Additions
			Plus	Minus	
1987‡					
Hydro					745
Steam					9,337
Internal Combustion					268
Total					10,372
1986‡					
Hydro					2,150
Steam					15,857
Internal Combustion					943
Total					18,951
1985‡					
Hydro					2,425
Steam					13,675
Internal Combustion					160
Total					16,271
1984‡					
Hydro					1,622
Steam					12,812
Internal Combustion					(155)
Total					14,280
1983‡					
Hydro					640
Steam					7,363
Internal Combustion					(135)
Total					8,077
1982‡					
Hydro					983
Steam					14,783
Internal Combustion					(469)
Total					15,297
1981‡					
Hydro					767
Steam					20,299
Internal Combustion					47
Total					21,113
1980‡					
Hydro					1,027
Steam					14,172
Internal Combustion					53
Total					15,252
1979‡					
Hydro					4,337
Steam					14,834
Internal Combustion					(40)
Total					19,131
1978‡					
Hydro					2,252
Steam					16,452
Internal Combustion					247
Total					18,951
1977‡					
Hydro					1,005
Steam					28,207
Internal Combustion					(13)
Total					29,199
1976‡					
Hydro					1,808
Steam					20,696
Internal Combustion					244
Total					22,748
1975‡					
Hydro					2,389
Steam					29,801
Internal Combustion					56
Total					32,246
1974‡					
Hydro					1,778
Steam					34,412
Internal Combustion					103
Total					36,293
1973‡					
Hydro					5,396
Steam					35,687
Internal Combustion					39
Total					41,122
1972‡					
Hydro					474
Steam					28,819
Internal Combustion					380
Total					29,673
1971‡					
Hydro					856
Steam					27,000
Internal Combustion					134
Total					27,990
1970					
Hydro	2,244	48	109	3	2,302
Steam	25,506	905	882	190	25,293
Internal Combustion	242	40	42	98	146
Total	27,992	993	1,033	291	27,741
1969					
Hydro	1,638	115	64	2	1,585
Steam	19,837	856	1,605	107	20,479
Internal Combustion	219	39	78	31	227
Total	21,694	1,010	1,747	140	22,291
1968					
Hydro	3,015	80	145	24	3,056
Steam	18,830	697	593	136	18,590
Internal Combustion	210	57	39	32	160
Total	22,055	834	777	192	21,806

Note: *Total may not equal sum of components due to independent rounding.*

**Beginning 1983 wind turbine capacity included in total—9.3 kW in thousands; 1984 total—9.6 kW in thousands; 1985 total—7.4 kW in thousands; 1986 total—7.5 kW in thousands; 1987 total—26.3 kW in thousands.*

Beginning 1984 solar energy capacity included in total—1.0 kW in thousands; 1985 total—13.5 kW in thousands; 1986 total—14.5 kW in thousands; 1987 total—16.5 kW in thousands.

***Adjustments are result of reclassification in ownership between industrial and electric utility plants and rerating of turbines within the Total Electric Utility Industry.*

‡Complete data not available at time of printing.

( ) Denotes negative figure.

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

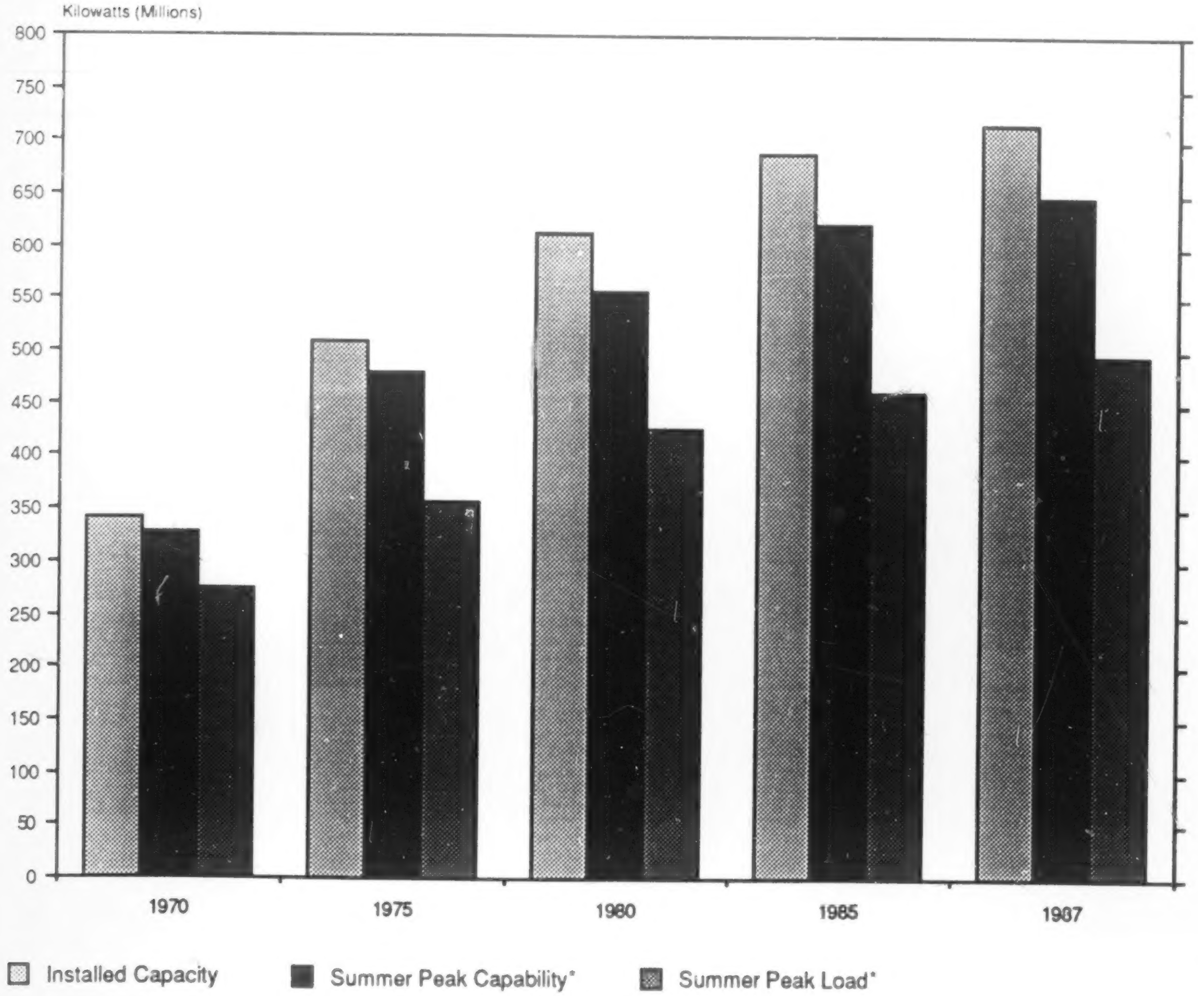
ELECTRIC POWER SUPPLY

SECTION II

CHART II-A

CAPACITY, CAPABILITY & PEAK LOAD

TOTAL ELECTRIC UTILITY INDUSTRY



** Excludes Alaska and Hawaii.*
Based on Table 1, page 7 and Table 7, page 14.
Sources: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861);*
Edison Electric Institute, Electric Power Annual Report.

TABLE 7

CAPABILITY*—PEAK LOAD—KILOWATTHOUR REQUIREMENTS TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)

Year	Capability at Time of Summer Peak Load (MW)	Non-Coincident Summer Peak Load (MW)	Capability at Time of Winter Peak Load (MW)†	Non-Coincident Winter Peak Load (MW)†	Capacity Margin Based on Non-Coincident Peak Load (%)†‡	Annual Kilowatthour Requirements (in Millions)	Annual Load Factor Based on Peak Load (%)
1987	**648,118**	**496,185**	**662,977**	**448,277**	**23.4**	**2,643,532**	**60.8**
1986	633,291	476,320	646,721	422,857	24.8	2,532,104	60.7
1985	621,597	460,503	636,475	423,660	25.9	2,499,226	62.0
1984	604,240	451,150	622,125	436,374	25.3	2,445,603	59.7
1983	596,449	447,526	612,453	410,779	25.0	2,341,633	59.5
1982	586,142	415,618	598,066	373,985	29.1	2,258,744	62.0
1981	572,219	429,349	586,569	397,800	25.0	2,311,026	61.0
1980	558,237	427,058	572,195	384,567	23.5	2,292,718	61.0
1979	544,506	398,424	554,525	368,876	26.8	2,246,927	64.4
1978	545,700	408,050	561,550	383,100	25.2	2,218,700	62.1
1977	516,000	396,350	537,600	360,200	23.2	2,132,300	61.4
1976	498,750	370,900	511,000	349,850	25.6	2,039,500	62.6
1975	479,300	356,800	492,450	331,100	25.6	1,919,500	61.4
1974	444,400	349,250	467,400	302,500	21.4	1,871,700	61.2
1973	415,500	343,900	433,150	295,150	17.2	1,868,800	62.0
1972	381,700	319,150	394,050	290,950	16.4	1,752,200	62.5
1971	353,250	292,100	366,700	261,650	17.3	1,617,100	63.2
1970	326,900	274,650	339,050	248,550	16.0	1,536,400	63.9
1969	300,300	257,650	311,450	236,600	14.2	1,446,000	64.1
1968	278,950	238,000	288,750	226,700	14.7	1,327,200	63.5
1967	257,950	213,450	267,750	205,850	17.3	1,221,500	65.3

**Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions. It must, therefore, provide the necessary allowance for maintenance, emergency outages, and system operating requirements. This rating is more indicative of the actual generating ability of existing power stations than the familiar name-plate rating as used in other tables of this publication.*

†Beginning in 1973 capability and peak load data shown under Winter represent turn-of-year data for the winter season that follows the summer peak load data for that calendar year. Previously, data in this series was always for the month of December.

‡Calculated from the maximum non-coincident peak load, summer or winter, and the capability at the time of this peak load. Percent Capacity Margin is the difference between capability and peak load divided by capability multiplied by 100.

Sources: North American Electric Reliability Council and Edison Electric Institute. All data series shown have a discontinuity between 1978 and 1979 because of the switch to NERC data. For calculation of percent changes between 1978 and 1979, see old series values for 1979 in Table 6 of 1979 edition.

TABLE 8

ELECTRICITY MADE AVAILABLE IN THE UNITED STATES

KILOWATTHOURS IN MILLIONS

	Generation								
Year	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States	Net Imports of Electric Energy	Total Available in U.S.	Estimated Population† (Thousands) (July 1)	kWh Per Person
1987	**2,022,260**	**549,867**	**2,572,127**	**N/A**	**2,572,127****	**46,338**	**2,618,465****	**243,249**	**10,765****
1986r	1,928,199	559,111	2,487,310	112,008	2,599,318	35,897	2,635,215	241,078	10,931
1985r	1,918,032	551,809	2,469,841	98,478	2,568,319	40,936	2,609,255	238,741	10,929
1984	1,848,916	567,388	2,416,304	71,520e	2,487,824	39,661	2,527,485	236,477	10,688
1983	1,764,080	546,205	2,310,285	57,678e	2,367,963	35,330	2,403,293	234,284	10,258
1982	1,711,576	529,635	2,241,211	61,076e	2,302,287	30,744	2,333,031	231,996	10,056
1981	1,785,500	509,312	2,294,812	64,446e	2,359,258	33,584	2,392,842	229,637	10,420
1980	1,782,933	503,481	2,286,414	67,945e	2,354,359	20,925	2,375,284	227,255	10,452
1979	1,756,170	491,189	2,247,359	71,375	2,318,734	20,334	2,339,068	224,567	10,416
1978	1,721,163	485,150	2,206,313	78,967	2,285,280	19,328	2,304,608	222,095	10,377
1977	1,684,084	440,082	2,124,166	87,575	2,211,741	17,415	2,229,156	219,760	10,144
1976	1,582,029	455,645	2,037,674	87,084	2,124,758	8,611	2,133,369	217,563	9,806
1975	1,486,844	430,775	1,917,619	85,362	2,002,981	6,185	2,009,166	215,465	9,325
1974	1,442,114	424,322	1,866,436	101,572	1,968,008	12,694	1,980,702	213,342	9,284
1973	1,448,860	407,356	1,856,216	102,529	1,958,745	14,278	1,973,023	211,357	9,335
1972	1,358,929	390,708	1,749,637	104,508	1,854,145	7,744	1,861,889	209,284	8,896
1971	1,248,596	363,993	1,612,589	103,239	1,715,828	3,530	1,719,358	206,827	8,313
1970	1,183,190	348,419	1,531,609	108,162	1,639,771	1,960	1,641,731	203,984	8,048
1969	1,102,162	340,020	1,442,182	110,575	1,552,757	1,072	1,553,829	201,385	7,716
1968	1,019,313	310,130	1,329,443	106,586	1,436,029	(631)	1,435,398	199,399	7,199
1967	928,439	285,926	1,214,365	102,935	1,317,300	(299)	1,317,001	197,457	6,670

Note: Total may not equal sum of components due to independent rounding.

**Includes non-electric utility industry facilities.*

***Excludes Other Sources.*

†U.S. Department of Commerce. Bureau of Census estimates; excludes Armed Forces overseas.

N/A Not Available

e Estimated. *r Revised.* *( ) Denotes negative figure.*

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759), Economic Regulatory Administration.* Electricity Transactions Across International Borders. *and Edison Electric Institute.*

TABLE 9

TOTAL UNITED STATES KILOWATTHOUR SOURCE AND DISPOSITION

1967-1987 — KILOWATTHOURS IN MILLIONS

	1987p	1986r	1985	1984	1983	1982	1981
SOURCE							
Generation							
Total Electric Utility Industry	2,572,127	2,487,310	2,469,841	2,416,304	2,310,285	2,241,211	2,294,812
Industrials*	N/A	71,289	70,178r	52,125e	42,029e	49,072e	56,045e
Industrials* — Received by Electric Utility Industry	53,832	40,719	28,300	19,395	15,649	12,004	8,401
Total Generation	**2,625,959**	**2,599,318**	**2,568,319r**	**2,487,824**	**2,367,963**	**2,302,287**	**2,359,258**
Imports from Canada & Mexico	52,219	40,713	45,901	42,219	38,668	34,284	35,416
Total Kilowatthours	**2,678,178**	**2,640,031**	**2,614,220r**	**2,530,043**	**2,406,631**	**2,336,571**	**2,394,674**
DISPOSITION							
Total Sales to Ultimate Customers	2,431,192	2,354,744	2,305,882	2,280,585	2,159,787	2,099,741	2,150,674
Exports to Canada & Mexico	5,881	4,816	4,965	2,558	3,337	3,540	1,832
Energy Used by Producer	2,112	1,247	1,833	2,849	2,633	2,539	1,462
Company Use & Free Service	8,401	8,536	9,336	10,958	10,650	12,051	10,068
Lost and Unaccounted For	230,592	199,399	222,026	180,968	188,195	169,628	174,593
Industrials*	N/A	71,289	70,178r	52,125e	42,029e	49,072e	56,045e
Total Kilowatthours	**2,678,178**	**2,640,031**	**2,614,220r**	**2,530,043**	**2,406,631**	**2,336,571**	**2,394,674**

	1980	1979	1978	1977	1976	1975	1974
SOURCE							
Generation							
Total Electric Utility Industry	2,286,414	2,247,359	2,206,313	2,124,166	2,037,674	1,917,619	1,866,436
Industrials*	60,369e	65,341	72,297	83,543	82,406	79,340	94,955
Industrials* — Received by Electric Utility Industry	7,576	6,034	6,670	4,032	4,678	6,022	6,617
Total Generation	**2,354,359**	**2,318,734**	**2,285,280**	**2,211,741**	**2,124,758**	**2,002,981**	**1,968,008**
Imports from Canada & Mexico	25,021	22,516	21,514	20,159	10,989	11,268	15,420
Total Kilowatthours	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**	**2,135,747**	**2,014,249**	**1,983,428**
DISPOSITION							
Total Sales to Ultimate Customers	2,126,094	2,084,400	2,017,818	1,950,791	1,849,625	1,733,024	1,700,769
Exports to Canada & Mexico	4,096	2,182	2,186	2,744	2,378	5,083	2,726
Energy Used by Producer	2,540	3,382	2,372	2,462	2,559	3,068	3,059
Company Use & Free Service	9,053	11,066	7,975	7,037	5,717	4,709	4,850
Lost and Unaccounted For	177,228	174,859	204,146	185,323	193,062	189,025	177,069
Industrials*	60,369e	65,341	72,297	83,543	82,406	79,340	94,955
Total Kilowatthours	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**	**2,135,747**	**2,014,249**	**1,983,428**

	1973	1972	1971	1970	1969	1968	1967
SOURCE							
Generation							
Total Electric Utility Industry	1,856,216	1,749,637	1,612,589	1,531,609	1,442,182	1,329,443	1,214,365
Industrials*	95,761	98,241	96,495	102,440	105,203	103,026	97,856
Industrials* — Received by Electric Utility Industry	6,768	6,267	6,744	5,722	5,372	3,560	5,079
Total Generation	**1,958,745**	**1,854,145**	**1,715,828**	**1,639,771**	**1,552,757**	**1,436,029**	**1,317,300**
Imports from Canada & Mexico	**16,848**	**10,496**	**7,043**	**6,169**	**4,902**	**3,654**	**4,051**
Total Kilowatthours	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**	**1,557,659**	**1,439,683**	**1,321,351**
DISPOSITION							
Total Sales to Ultimate Customers	1,703,203	1,577,714	1,466,441	1,391,359	1,307,178	1,202,321	1,107,023
Exports to Canada & Mexico	2,570	2,752	3,514	4,209	3,830	4,285	4,350
Energy Used by Producer	3,137	3,081	2,854	2,301	2,515	2,469	2,559
Company Use & Free Service	4,912	4,412	3,894	3,984	3,626	3,399	2,956
Lost and Unaccounted For	166,010	178,441	149,673	141,647	135,307	124,183	106,607
Industrials*	95,761	98,241	96,495	102,440	105,203	103,026	97,856
Total Kilowatthours	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**	**1,557,659**	**1,439,683**	**1,321,351**

N/A Not Available.

**Includes non-electric utility industry facilities.*

p Preliminary. *r Revised.* *e Estimated.*

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759), Economic Regulatory Adminstration.* Electricity Transactions Across International Borders, *and Edison Electric Institute.*

TABLE 10

WORLD POWER DATA

FIFTEEN COUNTRIES WITH GREATEST INSTALLED GENERATING CAPACITY

1986

Country	Installed Capacity (Kilowatts in Thousands)				Energy Production† (kWh in Millions)				Population (Thousands)	kWh Per Capita
	Hydro	Nuclear	Thermal	Total	Hydro	Nuclear	Thermal	Total		
United States	84,152	86,548	548,744	719,444	294,594	414,038	1,873,878	2,582,510	241,096‡	10,712
U.S.S.R	62,141	30,110	229,420	321,671	215,738	160,804	1,222,348	1,598,890	279,904	5,712
Japan	35,150	26,165	112,014	173,329	86,560	168,310	416,900	671,770	121,402	5,533
Canada	56,800	11,000	30,600	98,400	310,702	71,267	86,602	468,571	25,625	18,286
France	22,800	44,700	24,600	92,100	60,859	241,400	40,786	343,045	55,267	6,207
China (mainland)	27,000	—	60,000	87,000	100,000	—	344,130	444,130	1,045,537	425
Germany (West)	6,710	18,874	57,076	82,660	16,664	119,580	270,142	406,386	60,734	6,691
United Kingdom	4,190	7,144	55,178	66,512	4,067	59,079	235,010	298,156	52,834	5,643
Italy	17,863	1,273	37,069	56,205	41,190	8,758	139,041	188,989	57,249	3,301
India	15,965	1,230	37,494	54,689	53,764	5,022	143,788	202,574	783,940	258
Brazil	37,702	657	6,390	44,749	182,615	144	18,859	201,618	143,277	1,407
Spain	14,431	5,546	15,102	35,079	26,314	37,446	63,953	127,713	39,074	3,268
Australia	7,029	—	26,449	33,478	15,515	—	112,144	127,659	15,763	8,099
Sweden	15,813	9,648	7,639	33,100	60,694	70,243	7,086	138,023	8,357	16,516
Poland	1,976	—	27,797	29,773	3,782	—	136,512	140,294	37,546	3,737

† *Data presented on a gross generation basis.*

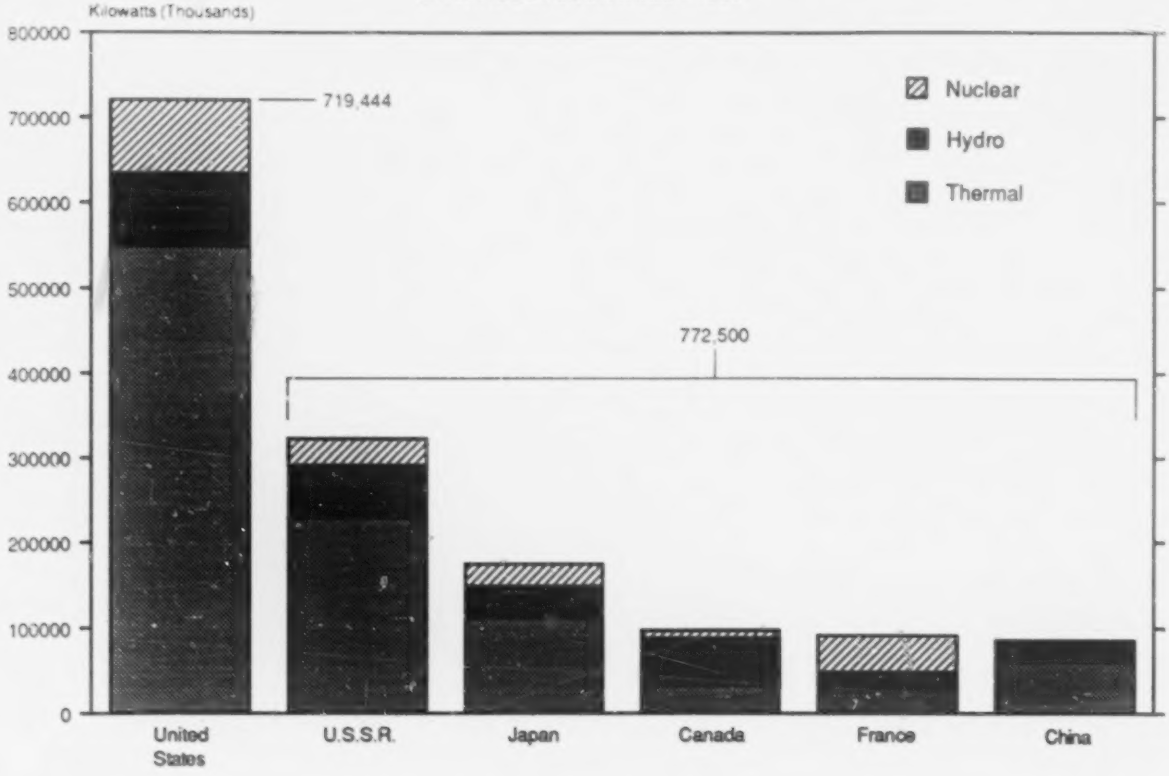
‡ *U.S. population July 1, 1986, excludes armed forces abroad. Dept. of Commerce, Bureau of Census.*

Sources: Capacity and production: UN 1986 Energy Statistics Yearbook; *population (except as noted):* The World Almanac and Book of Facts—*1988.*

CHART II-B

WORLD GENERATING CAPACITY

SIX LARGEST COUNTRIES—1986

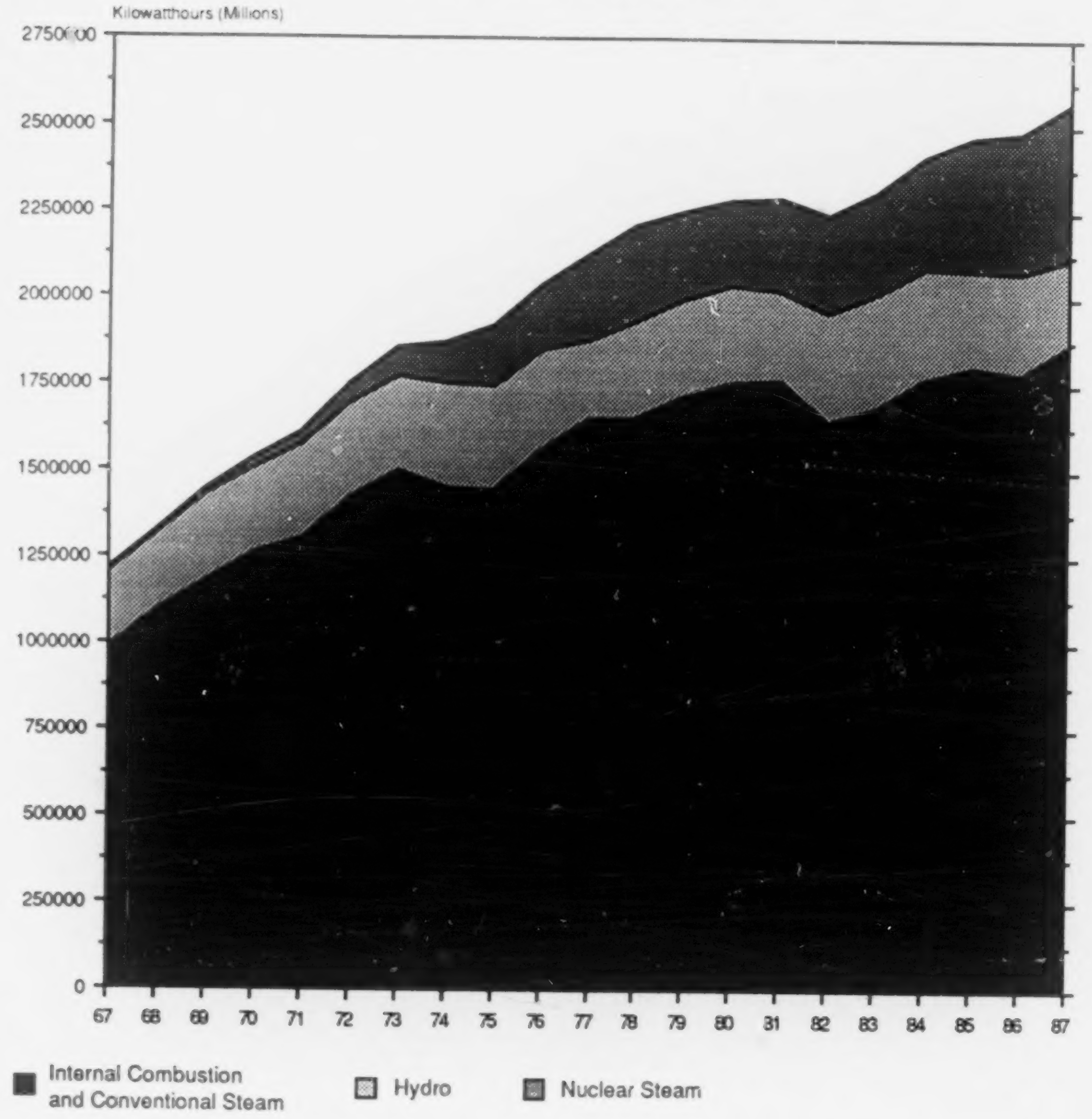


Based on Table 10, as shown above.
Source: UN 1986 Energy Statistics Yearbook.

GENERATION

SECTION III

CHART III-A
GENERATION BY TYPE OF PRIME MOVER
TOTAL ELECTRIC UTILITY INDUSTRY



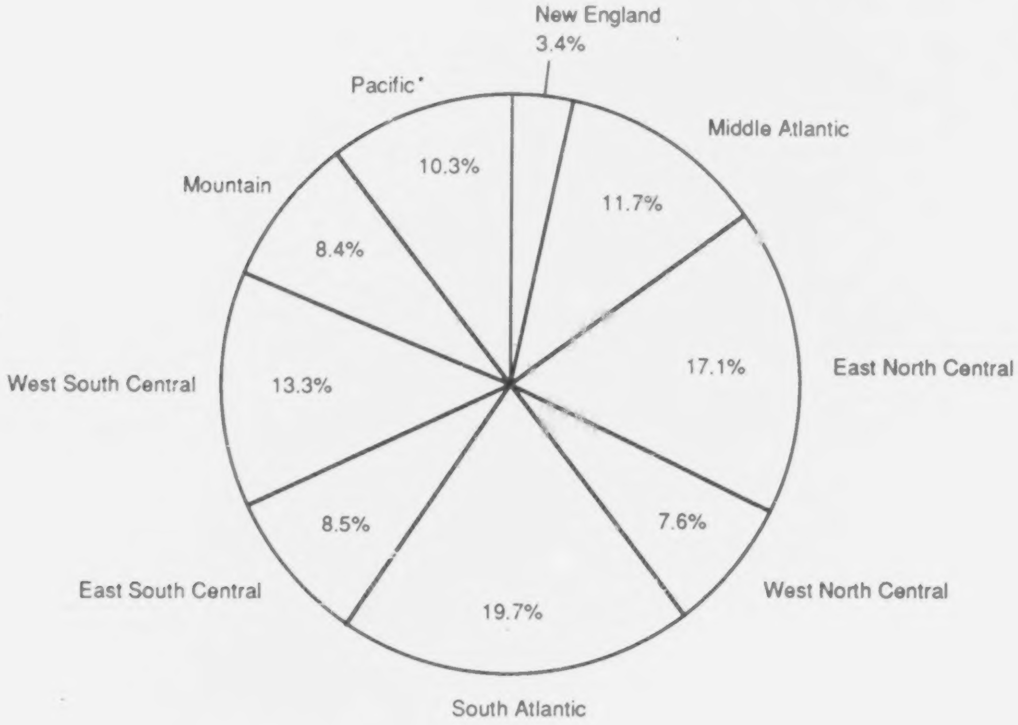
Based on Table 12, page 20.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759).*

CHART III-B

GENERATION BY CENSUS DIVISIONS

TOTAL ELECTRIC UTILITY INDUSTRY

1987



*Includes Alaska and Hawaii.
Based on Table 15, page 24.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759).

TABLE 12

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry†	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
			TOTAL (Generation by All Types of Prime Mover)				
1987	**2,572,127**	**2,022,260**	**122,508**	**427,359**	**86,211**	**205,363**	**135,786**
1986	2,487,310	1,928,199	113,897	445,214	78,869	224,854	141,491
1985	2,469,841	1,918,032	108,321	443,488	73,864	233,063	136,560
1984	2,416,304	1,848,916	101,970	465,418	74,672	253,928	136,818
1983	2,310,285	1,764,080	84,710	461,495	73,069	258,181	130,245
1982	2,241,211	1,711,576	77,098	452,537	76,569	241,004	134,964
1981	2,294,812	1,785,500	73,314	435,998	80,701	232,222	123,075
1980	2,286,414	1,782,933	63,550	439,931	86,579	235,051	118,301
1979	2,247,359	1,756,170	54,404	436,785	87,265	235,570	113,950
1978	2,206,313	1,721,163	48,717	436,433	89,700	235,257	111,476
1977	2,124,166	1,684,084	44,884	395,198	83,382	213,633	98,183
1976	2,037,674	1,582,029	41,223	414,422	78,176	236,024	100,222
1975	1,917,619	1,486,844	35,328	395,447	81,518	221,226	92,703
1974	1,866,436	1,442,114	33,844	390,478	78,677	219,821	91,980
1973	1,856,216	1,448,860	35,127	372,229	80,872	211,715	79,642
1972	1,749,637	1,358,929	31,714	358,994	78,931	206,668	73,395
1971	1,612,589	1,248,596	27,227	336,766	72,609	194,462	69,695
1970	1,531,609	1,183,190	23,459	324,960	71,394	185,753	67,813
1969	1,442,182	1,102,162	17,513	322,507	69,614	183,245	69,648
1968	1,329,443	1,019,313	14,140	295,990	63,804	170,834	61,352
1967	1,214,365	928,439	12,389	273,537	57,788	162,399	53,350
			HYDRO (Generation of Generators Driven by Water Wheels and Turbines)				
1987	**249,695**	**58,253**	**398**	**191,044**	**12,285**	**124,680**	**54,079**
1986	290,844	71,356	396	219,091	16,841	141,990	60,260
1985	281,149	66,334	410	214,406	14,496	142,435	57,475
1984	321,150	83,639	279	237,232	15,775	162,268	59,190
1983	332,130	88,663	303	243,164	17,266	160,989	64,910
1982	309,213	81,527	294	227,392	17,061	148,027	62,305
1981	260,684	61,680	231	198,773	13,700	128,690	56,383
1980	276,039	70,500	267	205,272	15,603	131,909	57,760
1979	279,790	74,105	244	205,441	13,270	137,212	54,959
1978	280,432	72,381	275	207,776	14,889	136,804	56,083
1977	220,446	55,343	220	164,883	8,572	111,951	44,360
1976	283,734	68,034	221	215,479	14,444	144,218	56,817
1975	300,065	81,524	251	218,290	16,619	142,943	58,728
1974	300,928	81,204	197	219,527	17,218	137,882	64,427
1973	271,634	77,451	229	193,954	13,439	123,148	57,367
1972	272,626	76,820	220	195,586	15,152	126,328	54,106
1971	266,314	76,521	243	189,550	14,765	121,573	53,212
1970	247,456	70,587	214	176,655	14,453	110,695	51,507
1969	250,193	74,833	215	175,145	15,494	105,687	53,964
1968	222,491	67,201	239	155,051	13,043	94,874	47,134
1967	221,518	72,072	223	149,223	10,602	96,228	42,393
			CONVENTIONAL STEAM (Generation of Generators Driven by Steam Engines and Turbines)				
1987	**1,865,463**	**1,531,106**	**121,845**	**212,512**	**73,082**	**80,890**	**58,540**
1986	1,780,853	1,469,751	113,219	197,883	61,198	83,092	53,593
1985	1,803,323	1,503,349	107,438	192,536	56,543	77,976	58,017
1984	1,765,608	1,487,840	101,184	176,584	54,008	66,989	55,587
1983	1,682,268	1,426,449	84,015	171,804	51,503	69,237	51,063
1982	1,646,883	1,396,336	76,481	174,066	54,507	65,682	53,878
1981	1,758,660	1,492,062	72,619	193,980	62,421	80,715	50,844
1980	1,755,634	1,499,918	62,803	192,913	63,899	83,715	45,299
1979	1,708,256	1,472,652	53,609	181,995	65,100	77,948	38,947
1978	1,644,756	1,415,266	47,887	181,603	66,212	81,535	33,856
1977	1,648,105	1,422,684	44,193	181,228	65,402	83,202	32,624
1976	1,557,647	1,346,179	38,409	173,059	57,547	87,584	27,928
1975	1,439,374	[illegible]	[illegible]	156,104	57,958	75,549	22,597
1974	1,445,808	[illegible]	32,887	151,912	56,605	75,640	19,667
1973	1,494,901	[illegible]	34,106	167,905	62,422	88,240	17,243
1972	1,416,218	[illegible]	30,713	155,507	58,814	80,324	16,369
1971	1,301,960	1,135,674	26,245	140,041	53,246	72,866	13,929
1970	1,256,294	1,092,564	22,610	141,120	52,380	75,048	13,692
1969	1,172,481	1,016,361	16,760	139,360	49,800	77,544	12,016
1968	1,089,239	942,927	13,332	132,980	46,744	75,927	10,309
1967	980,336	850,541	11,434	118,361	43,292	66,136	8,933

See page 21 for footnotes.

TABLE 12 (continued)

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry†	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
			NUCLEAR STEAM (Generation of Generators Driven by Nuclear Reactors)				
1987	**455,270**	**432,239**	**129**	**22,902**	**(57)**	**(207)**	**23,166**
1986	414,038	386,513	157	27,367	(41)	(230)	27,638
1985	383,691	347,769	323	35,599	1,885	12,646	21,069
1984	327,634	276,849	319	50,466	3,760	24,665	22,040
1983	293,677	248,379	201	45,097	2,875	27,951	14,271
1982	282,773	233,213	137	49,423	3,349	27,294	18,780
1981	272,674	231,190	241	41,243	2,585	22,810	15,847
1980	251,121	211,831	214	39,076	4,426	19,413	15,237
1979	255,155	208,788	201	46,166	5,729	20,402	20,035
1978	276,403	232,742	174	43,487	5,046	16,911	21,530
1977	250,882	205,257	89	45,536	5,865	18,473	21,198
1976	191,107	167,098	2,157	21,852	2,161	4,214	15,477
1975	172,506	154,985	951	16,570	2,470	2,722	11,378
1974	113,727	99,042	313	14,372	198	6,289	7,885
1973	83,334	77,790	199	5,345	—	314	5,031
1972	54,092	50,933	240	2,919	—	—	2,919
1971	38,106	35,357	196	2,553	—	—	2,553
1970	21,797	19,063	120	2,614	—	—	2,614
1969	13,928	10,261	—	3,667	—	—	3,667
1968	12,528	8,611	15	3,902	—	—	3,902
1967	7,655	5,499	141	2,015	—	—	2,015
			INTERNAL COMBUSTION (Generation of Generators Driven by Internal Combustion Engines)				
1987	**1,685**	**649**	**136**	**900**	**899**	**—**	**1**
1986	1,556	565	124	867	866	—	*
1985	1,662	570	150	942	938	4	*
1984	1,901	579	188	1,133	1,130	3	*
1983	2,207	588	190	1,429	1,425	3	1
1982	2,343	501	186	1,656	1,653	2	1
1981	2,795	568	224	2,003	1,995	7	1
1980	3,620	684	266	2,670	2,651	14	5
1979	4,158	625	350	3,183	3,166	8	9
1978	4,722	774	381	3,567	3,553	7	7
1977	4,733	800	382	3,551	3,543	7	1
1976	5,186	718	436	4,032	4,024	8	—
1975	5,674	712	479	4,483	4,471	12	—
1974	5,973	859	447	4,667	4,656	10	1
1973	6,347	731	591	5,025	5,011	13	1
1972	6,701	1,178	541	4,982	4,965	16	1
1971	6,209	1,044	543	4,622	4,598	23	1
1970	6,062	976	515	4,571	4,561	10	—
1969	5,580	707	538	4,335	4,320	14	1
1968	5,185	574	554	4,057	4,017	33	7
1967	4,856	327	591	3,938	3,894	35	9

Note: Total may not equal sum of components due to independent rounding.

†*Beginning 1983 generation by wind included in total; Total Electric Utility Industry (1983)—2.7 kWh in millions; Investor-Owned Utilities—1.5 kWh in millions; Federal—1.2 kWh in millions. Total Electric Utility Industry (1984)—6.5 kWh in millions; Investor-Owned Utilities—3.5 kWh in millions; Federal—2.9 kWh in millions. Total Electric Utility Industry (1985)—5.8 kWh in millions; Investor-Owned Utilities—2.8 kWh in millions; Federal—2.9 kWh in millions. Total Electric Utility Industry (1986)—4.2 kWh in millions; Investor-Owned Utilities—2.8 kWh in millions; Federal—1.4 kWh in millions. Total Electric Utility Industry (1987)—3.5 kWh in millions; Investor-Owned Utilities—3.7 kWh in millions; Federal—(0.1) in millions.*
Beginning 1984 generation by solar included in total; Total Electric Utility Industry (1984)—5.2 kWh in millions; Investor-Owned Utilities—5.0 kWh in millions; Municipal Utilities—0.2 kWh in millions. Total Electric Utility Industry (1985)—10.6 kWh in millions; Investor-Owned Utilities—8.8 kWh in millions; Municipal Utilities—1.8 kWh in millions. Total Electric Utility Industry (1986)—14.0 kWh in millions; Investor-Owned Utilities—10.4 kWh in millions; Municipal Utilities—3.6 kWh in millions. Total Electric Utility Industry (1987)—10.5 kWh in millions; Investor-Owned Utilities—8.2 kWh in millions; Municipal Utilities—2.3 kWh in millions.

( ) Denotes negative figure.

**Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 13

GENERATION PER KILOWATT OF INSTALLED NAME PLATE CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

KILOWATTHOURS

Year	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned
		TOTAL				HYDRO		
1987	**3,608**	**3,687**	**4,641**	**3,097**	**2,919**	**2,005**	**3,476**	**3,389**
1986	3,562	3,589	4,466	3,288	3,459	2,525	3,600	3,932
1985	3,629	3,670	4,393	3,327	3,437	2,471	4,432	3,908
1984	3,632	3,624	4,345	3,535	4,025	3,273	3,444	4,381
1983	3,532	3,512	3,880	3,550	4,228	3,578	3,741	4,529
1982	3,489	3,458	3,868	3,547	3,983	3,334	3,973	4,281
1981	3,676	3,690	4,335	3,533	3,396	2,541	3,448	3,792
1980	3,773	3,789	4,344	3,641	3,639	2,929	3,985	3,968
1979	3,816	3,827	4,272	3,725	3,823	3,103	3,642	4,173
1978	3,872	3,859	4,326	3,877	4,013	3,080	4,104	4,486
1977	3,892	3,945	4,308	3,646	3,230	2,391	3,284	3,660
1976	3,920	3,884	4,320	4,024	4,244	2,942	3,299	4,935
1975	3,895	3,836	4,254	4,102	4,634	3,556	4,149	5,226
1974	4,075	3,991	4,585	4,371	4,802	3,649	3,582	5,439
1973	4,427	4,385	5,021	4,545	4,597	3,788	4,164	5,027
1972	4,557	4,510	5,210	4,693	4,855	4,022	4,074	5,287
1971	4,541	4,532	5,122	4,534	4,800	4,035	4,418	5,198
1970	4,681	4,707	4,949	4,570	4,591	3,785	3,821	5,018
1969	4,772	4,783	4,518	4,749	4,815	4,069	3,805	5,226
1968	4,745	4,804	4,382	4,571	4,482	3,685	4,193	4,946
1967	4,697	4,770	4,289	4,482	4,759	4,176	3,912	5,105
		STEAM				INTERNAL COMBUSTION		
1987	**3,736**	**3,798**	**4,695**	**3,008**	**277**	**265**	**456**	**270**
1986	3,606	3,661	4,520	2,946	284	290	398	270
1985	3,683	3,744	4,446	3,032	338	410	460	294
1984	3,605	3,652	4,399	3,055	386	414	593	354
1983	3,463	3,519	3,928	2,966	436	377	608	448
1982	3,449	3,477	3,924	3,139	437	285	554	506
1981	3,748	3,764	4,417	3,478	501	303	638	598
1980	3,825	3,849	4,433	3,528	655	372	764	800
1979	3,849	3,881	4,381	3,527	753	347	903	956
1978	3,885	3,916	4,446	3,578	872	457	992	1,069
1977	4,022	4,048	4,423	3,777	893	487	1,129	1,070
1976	3,906	3,956	4,437	3,478	1,000	454	1,313	1,233
1975	3,815	3,868	4,375	3,358	1,127	479	1,423	1,396
1974	3,995	4,029	4,756	3,629	1,206	592	1,294	1,478
1973	4,441	4,444	5,200	4,298	1,300	478	1,723	1,668
1972	4,551	4,563	5,440	4,318	1,434	778	1,577	1,769
1971	4,540	4,589	5,377	4,063	1,406	769	1,578	1,702
1970	4,751	4,803	5,234	4,321	1,417	751	1,510	1,733
1969	4,820	4,869	4,819	4,493	1,364	593	1,575	1,695
1968	4,862	4,934	4,734	4,425	1,330	535	1,583	1,639
1967	4,742	4,851	4,671	4,096	1,326	364	1,672	1,633

Sources: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report (EIA-759), Annual Electric Generator Report (EIA-860), and Annual Electric Utility Report (EIA-861), *as shown in Tables 2 and 12.*

TABLE 14

GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

Year	Investor-Owned	Coopera-tives	Govern-ment-Owned	Total	Investor-Owned	Coopera-tives	Govern-ment-Owned	Total	Investor-Owned	Coopera-tives	Govern-ment-Owned
	TOTAL			HYDRO				CONVENTIONAL STEAM			
1987	**78.6%**	**4.8%**	**16.6%**	**9.7%**	**2.3%**	***%**	**7.4%**	**72.5%**	**59.5%**	**4.7%**	**8.3%**
1986	77.5	4.6	17.9	11.7	2.9	*	8.8	71.6	59.1	4.5	8.0
1985	77.7	4.4	17.9	11.4	2.7	*	8.7	73.0	60.9	4.3	7.8
1984	76.5	4.2	19.3	13.3	3.5	*	9.8	73.1	61.6	4.2	7.3
1983	76.4	3.6	20.0	14.4	3.9	*	10.5	72.8	61.7	3.6	7.5
1982	76.4	3.4	20.2	13.8	3.7	*	10.1	73.5	62.3	3.4	7.8
1981	77.8	3.2	19.0	11.4	2.7	*	8.7	76.6	65.0	3.2	8.4
1980	78.0	2.8	19.2	12.1	3.1	*	9.0	76.8	65.6	2.8	8.4
1979	78.1	2.4	19.5	12.4	3.3	*	9.1	76.0	65.5	2.4	8.1
1978	78.0	2.2	19.8	12.7	3.3	*	9.4	74.6	64.2	2.2	8.2
1977	79.3	2.1	18.6	10.4	2.6	*	7.8	77.6	67.0	2.1	8.5
1976	77.7	2.0	20.3	13.9	3.3	*	10.6	76.4	66.1	1.9	8.4
1975	77.5	1.9	20.6	15.6	4.2	*	11.4	75.1	65.2	1.8	8.1
1974	77.3	1.8	20.9	16.1	4.4	*	11.7	77.5	67.6	1.8	8.1
1973	78.1	1.9	20.0	14.6	4.2	*	10.4	80.6	69.7	1.9	9.0
1972	77.7	1.8	20.5	15.6	4.4	*	11.2	80.9	70.3	1.8	8.8
1971	77.4	1.7	20.9	16.5	4.7	*	11.8	80.7	70.4	1.7	8.6
1970	77.3	1.5	21.2	16.2	4.7	*	11.5	82.0	71.3	1.5	9.2
1969	76.4	1.2	22.4	17.3	5.2	*	12.1	81.3	70.4	1.2	9.7
1968	76.7	1.0	22.3	16.8	5.1	*	11.7	81.9	70.9	1.0	10.0
1967	76.5	1.0	22.5	18.2	5.9	*	12.3	80.7	70.1	0.9	9.7

Year	Total	Investor-Owned	Coopera-tives	Govern-ment-Owned	Total	Investor-Owned	Coopera-tives	Govern-ment-Owned
	NUCLEAR STEAM				INTERNAL COMBUSTION			
1987	**17.7%**	**16.8%**	***%**	**0.9%**	**0.1%**	***%**	***%**	***%**
1986	16.6	15.5	*	1.1	0.1	*	*	*
1985	15.5	14.1	*	1.4	0.1	*	*	*
1984	13.5	11.4	*	2.1	0.1	*	*	0.1
1983	12.7	10.8	*	1.9	0.1	*	*	0.1
1982	12.6	10.4	*	2.2	0.1	*	*	0.1
1981	11.9	10.1	*	1.8	0.1	*	*	0.1
1980	11.0	9.3	*	1.7	0.1	*	*	0.1
1979	11.4	9.3	*	2.1	0.2	*	*	0.2
1978	12.5	10.5	*	2.0	0.2	*	*	0.2
1977	11.8	9.7	*	2.1	0.2	*	*	0.2
1976	9.4	8.2	0.1	1.1	0.3	0.1	*	0.2
1975	9.0	8.0	0.1	0.9	0.3	0.1	*	0.2
1974	6.1	5.3	*	0.8	0.3	*	*	0.3
1973	4.5	4.2	*	0.3	0.3	*	*	0.3
1972	3.1	2.9	*	0.2	0.4	0.1	*	0.3
1971	2.4	2.2	*	0.2	0.4	0.1	*	0.3
1970	1.4	1.2	*	0.2	0.4	0.1	*	0.3
1969	1.0	0.7	—	0.3	0.4	0.1	*	0.3
1968	1.0	0.7	*	0.3	0.3	*	*	0.3
1967	0.7	0.5	*	0.2	0.4	*	0.1	0.3

*Less than one tenth of one percent.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759), as shown in Table 12.

TABLE 15

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

1986 and 1987—KILOWATTHOURS IN MILLIONS

	Total Electric Utility Industry†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustio	
Division/State	1987	1986	1987	1986	1987	1986	1987	1986	1987	198
Total United States	**2,572,127**	**2,487,310**	**249,695**	**290,844**	**1,865,463**	**1,780,853**	**455,270**	**414,038**	**1,685**	**1,556**
Maine	8,346	10,890	1,703	2,033	2,596	2,612	4,043	6,242	5	3
New Hampshire	6,045	6,118	896	1,104	5,149	5,013	—	—	—	—
Vermont	4,634	3,149	925	974	171	114	3,536	2,058	2	2
Massachusetts	34,735	34,481	247	329	33,218	31,618	1,136	2,420	134	113
Rhode Island	837	724	—	—	823	712	—	—	14	12
Connecticut	33,173	32,188	337	367	12,292	13,152	20,540	18,667	3	1
New England	**87,769**	**87,550**	**4,109**	**4,809**	**54,249**	**53,222**	**29,256**	**29,388**	**156**	**132**
New York	117,630	111,295	27,546	29,480	67,110	59,689	22,926	22,084	48	42
New Jersey	39,324	28,782	(312)	(289)	16,939	14,301	22,697	14,770	*	—
Pennsylvania	145,363	147,586	1,131	1,452	109,244	106,307	34,982	39,820	5	6
Middle Atlantic	**302,317**	**287,663**	**28,365**	**30,642**	**193,293**	**180,297**	**80,606**	**76,675**	**53**	**48**
Ohio	119,661	111,507	225	172	111,917	111,307	7,513	24	6	3
Indiana	78,575	77,342	507	506	78,064	76,831	—	—	5	5
Illinois	109,887	106,892	90	124	59,546	64,132	50,194	42,614	57	21
Michigan	87,035	76,061	364	604	72,204	63,118	14,389	12,257	78	81
Wisconsin	44,030	42,785	1,319	2,161	31,396	29,421	11,311	11,199	5	4
East North Central	**439,189**	**414,586**	**2,505**	**3,567**	**353,127**	**344,809**	**83,407**	**66,094**	**150**	**115**
Minnesota	34,406	28,401	720	936	22,111	16,407	11,554	11,052	20	6
Iowa	25,549	24,137	970	952	22,048	20,190	2,523	2,993	8	1
Missouri	55,087	54,201	1,447	1,996	47,318	45,010	6,284	7,170	37	25
North Dakota	22,620	22,182	1,982	2,326	20,638	19,856	—	—	—	(*)
South Dakota	6,265	7,808	5,354	5,704	911	2,105	—	—	(*)	(1)
Nebraska	20,489	18,839	1,567	1,678	10,319	9,482	8,589	7,658	14	21
Kansas	30,822	29,531	9	8	24,098	22,317	6,471	6,959	244	247
West North Central	**195,238**	**185,099**	**12,050**	**13,600**	**147,444**	**135,369**	**35,421**	**35,832**	**323**	**299**
Delaware	8,511	8,411	—	—	8,503	8,405	—	—	8	5
Maryland	36,251	37,732	1,612	1,876	24,499	22,993	10,070	12,828	69	35
District of Columbia	233	165	—	—	233	165	—	—	—	—
Virginia	42,697	42,643	807	47	23,739	21,376	18,145	21,215	7	5
West Virginia	78,372	77,520	315	361	78,057	77,159	—	—	—	—
North Carolina	78,825	76,797	5,098	2,518	45,127	53,993	28,600	20,286	—	—
South Carolina	64,410	56,546	2,160	1,217	22,960	19,704	39,290	35,625	*	*
Georgia	85,806	74,909	3,121	2,097	67,425	65,574	15,259	7,238	1	*
Florida	110,765	108,465	217	212	91,572	85,941	18,773	22,036	203	276
South Atlantic	**505,870**	**483,188**	**13,330**	**8,328**	**362,115**	**355,310**	**130,137**	**119,228**	**288**	**322**
Kentucky	67,454	66,915	2,948	2,734	64,506	64,181	—	—	*	*
Tennessee	58,312	56,455	7,566	5,326	50,854	51,234	(108)	(105)	—	—
Alabama	69,336	68,575	7,449	5,227	50,640	51,786	11,248	11,561	—	—
Mississippi	22,388	18,980	—	—	14,671	14,893	7,717	4,087	—	—
East South Central	**217,490**	**210,924**	**17,962**	**13,286**	**180,671**	**182,094**	**18,857**	**15,544**	*****	*****
Arkansas	36,287	35,135	2,407	2,813	22,510	23,445	11,369	8,876	*	*
Louisiana	51,309	52,843	—	—	38,983	42,203	12,324	10,637	2	3
Oklahoma	42,737	41,073	2,948	2,951	39,760	38,083	—	—	29	39
Texas	212,620	212,850	2,158	1,972	210,427	210,840	—	—	35	38
West South Central	**342,952**	**341,902**	**7,513**	**7,737**	**311,679**	**314,572**	**23,693**	**19,513**	**66**	**80**
Montana	20,884	22,448	8,925	10,857	11,959	11,591	—	—	*	*
Idaho	8,105	12,153	8,105	12,153	*	1	—	—	*	*
Wyoming	37,370	28,774	768	1,140	36,603	27,633	—	—	(*)	(*)
Colorado	28,810	28,282	1,818	2,263	26,817	25,968	174	52	2	(1)
New Mexico	25,585	23,601	164	166	25,420	23,434	—	—	*	*
Arizona	51,600	51,175	10,119	14,446	28,023	26,753	13,458	9,976	*	*
Utah	26,346	16,819	856	1,413	25,482	15,405	—	—	8	1
Nevada	17,442	19,858	2,526	4,584	14,917	15,275	—	—	(1)	(1)
Mountain	**216,143**	**203,110**	**33,281**	**47,021**	**169,220**	**146,059**	**13,632**	**10,028**	**10**	**(1)**
Washington	83,756	92,532	69,698	78,831	8,529	5,262	5,528	8,439	*	*
Oregon	39,739	47,780	35,431	40,743	(39)	(44)	4,348	7,081	(*)	(*)
California	130,344	121,865	24,564	41,459	75,359	54,148	30,387	26,215	20	26
Pacific	**253,839**	**262,178**	**129,693**	**161,033**	**83,849**	**59,366**	**40,263**	**41,735**	**20**	**26**
Alaska	4,122	4,252	872	809	3,045	3,235	—	—	206	208
Hawaii	7,197	6,858	15	12	6,770	6,520	—	—	411	327
Alaska & Hawaii	**11,319**	**11,110**	**887**	**820**	**9,815**	**9,755**	**—**	**—**	**618**	**535**

Note: Total may not equal sum of components due to independent rounding.

†Total includes generation by wind (1986—4.2 kWh in millions; 1987—3.5 kWh in millions) and generation by solar (1986—14.0 kWh in millions; 1987—10.5 kWh in millions).

( ) Denotes negative figure. **Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy, Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 16

GENERATION

INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

1986 and 1987 – KILOWATTHOURS IN MILLIONS

	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
Division/State	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986
Total United States	**2,022,260**	**1,928,199**	**58,253**	**71,356**	**1,531,106**	**1,469,751**	**432,239**	**386,513**	**649**	**565**
Maine	8,343	10,883	1,700	2,026	2,596	2,612	4,043	6,242	5	3
New Hampshire	6,045	6,118	896	1,104	5,149	5,013	—	—	—	—
Vermont	4,415	2,994	865	922	12	11	3,536	2,058	1	2
Massachusetts	33,149	33,370	219	305	31,691	30,548	1,136	2,420	103	97
Rhode Island	837	724	—	—	823	712	—	—	14	12
Connecticut	33,157	32,171	326	354	12,289	13,149	20,540	18,667	2	1
New England	**85,945**	**86,261**	**4,005**	**4,712**	**52,560**	**52,046**	**29,256**	**29,388**	**124**	**115**
New York	81,480	72,542	3,690	4,471	63,907	57,523	13,877	10,543	6	5
New Jersey	39,148	28,660	(312)	(289)	16,763	14,179	22,697	14,770	—	—
Pennsylvania	145,363	147,586	1,131	1,452	109,244	106,307	34,982	39,820	5	6
Middle Atlantic	**265,991**	**248,788**	**4,508**	**5,633**	**189,914**	**178,010**	**71,557**	**65,133**	**11**	**12**
Ohio	109,162	100,872	220	168	101,425	100,678	7,513	24	5	2
Indiana	72,895	71,856	507	506	72,388	71,350	—	—	1	*
Illinois	106,844	103,861	72	55	56,578	61,192	50,194	42,614	1	*
Michigan	82,084	71,599	152	364	67,542	58,972	14,389	12,257	1	6
Wisconsin	39,849	38,654	1,174	1,959	27,493	25,653	11,182	11,042	1	1
East North Central	**410,835**	**386,842**	**2,124**	**3,051**	**325,426**	**317,844**	**83,278**	**65,937**	**7**	**10**
Minnesota	33,661	27,789	705	911	21,402	15,825	11,554	11,052	(*)	*
Iowa	23,684	22,485	953	941	20,208	18,551	2,523	2,993	(*)	(*)
Missouri	40,485	40,253	646	889	33,556	32,194	6,284	7,170	(*)	(*)
North Dakota	2,433	2,515	—	—	2,433	2,516	—	—	—	(*)
South Dakota	910	2,104	1	1	910	2,105	—	—	(*)	(1)
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	26,833	25,938	9	8	20,353	18,971	6,471	6,959	*	—
West North Central	**128,006**	**121,085**	**2,313**	**2,751**	**98,862**	**90,162**	**26,832**	**28,174**	**(1)**	**(2)**
Delaware	8,175	7,952	—	—	8,175	7,952	—	—	—	—
Maryland	36,183	37,699	1,612	1,876	24,499	22,993	10,070	12,828	2	2
District of Columbia	233	165	—	—	233	165	—	—	—	—
Virginia	41,919	42,389	32	(202)	23,738	21,375	18,145	21,215	4	2
West Virginia	78,372	77,520	315	361	78,057	77,159	—	—	—	—
North Carolina	77,844	76,148	4,209	1,950	45,035	53,911	28,600	20,286	—	—
South Carolina	53,302	47,155	1,035	455	12,976	11,075	39,290	35,625	—	—
Georgia	84,126	73,722	1,443	913	67,423	65,570	15,259	7,238	1	*
Florida	89,348	90,098	1	1	70,574	68,061	18,773	22,036	*	*
South Atlantic	**469,503**	**452,847**	**8,647**	**5,353**	**330,712**	**328,261**	**130,137**	**119,228**	**7**	**5**
Kentucky	29,916	27,897	432	464	29,485	27,433	—	—	—	—
Tennessee	616	92	616	92	—	—	—	—	—	—
Alabama	48,889	49,729	3,322	2,034	34,220	36,008	11,347	11,686	—	—
Mississippi	20,130	16,605	—	—	12,414	12,518	7,717	4,087	—	—
East South Central	**99,552**	**94,322**	**4,369**	**2,590**	**76,119**	**75,959**	**19,064**	**15,773**	**—**	**—**
Arkansas	33,995	32,471	116	150	22,510	23,445	11,369	8,876	—	*
Louisiana	43,919	44,508	—	—	31,595	33,870	12,324	10,637	*	*
Oklahoma	31,803	31,957	—	—	31,801	31,953	—	—	2	4
Texas	179,437	179,960	55	57	179,382	179,895	—	—	*	8
West South Central	**289,155**	**288,896**	**171**	**207**	**265,287**	**269,163**	**23,693**	**19,513**	**3**	**13**
Montana	16,409	17,047	4,450	5,456	11,959	11,591	—	—	*	*
Idaho	5,566	8,717	5,566	8,717	*	1	—	—	*	*
Wyoming	25,180	18,436	2	1	25,179	18,435	—	—	(*)	(*)
Colorado	11,856	12,533	120	138	11,560	12,343	174	52	3	*
New Mexico	24,233	22,285	—	—	24,232	22,285	—	—	*	*
Arizona	21,566	17,670	36	36	8,072	7,657	13,458	9,976	*	*
Utah	14,220	11,598	177	366	14,043	11,223	—	—	—	—
Nevada	14,940	15,296	24	22	14,917	15,275	—	—	(1)	(1)
Mountain	**133,969**	**123,573**	**10,374**	**14,737**	**109,961**	**98,808**	**13,632**	**10,028**	**3**	**(*)**
Washington	12,065	9,184	3,536	3,922	8,529	5,262	—	—	*	*
Oregon	10,600	15,488	6,292	8,451	(39)	(44)	4,348	7,081	(*)	(*)
California	109,306	93,918	11,826	19,870	67,004	47,760	30,443	26,257	20	18
Pacific	**131,971**	**118,590**	**21,654**	**32,243**	**75,494**	**52,978**	**34,791**	**33,338**	**20**	**18**
Alaska	135	136	72	67	—	—	—	—	63	69
Hawaii	7,197	6,858	15	12	6,770	6,520	—	—	411	327
Alaska & Hawaii	**7,332**	**6,994**	**88**	**79**	**6,770**	**6,520**	**—**	**—**	**474**	**395**

Note: Total may not equal sum of components due to independent rounding.

†Total includes generation by wind (1986—2.8 kWh in millions; 1987—3.7 kWh in millions) and generation by solar (1986—10.4 kWh in millions; 1987—8.2 kWh in millions).

( ) Denotes negative figure. **Less than five hundred thousand kilowatthours.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 17

GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY AND INVESTOR-OWNED ELECTRIC UTILITIES

BY MONTH AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1984-1987—KILOWATTHOURS IN MILLIONS

	Total Electric Utility Industry*					Investor-Owned Electric Utilities*				
Year—Month	Total	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion	Total	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion
YEAR—1987										
January	222,749	25,412	157,231	39,975	132	172,804	5,880	129,174	37,697	53
February	194,034	21,226	136,096	36,598	114	152,083	5,326	111,793	34,914	49
March	201,849	23,248	141,189	37,290	122	159,397	6,749	116,975	35,623	50
April	189,496	22,025	133,834	33,518	117	148,877	6,052	110,428	32,345	51
May	206,074	24,202	147,420	34,320	130	160,451	5,114	121,837	33,441	57
June	225,589	20,863	167,992	36,560	171	178,067	4,151	138,477	35,383	53
July	247,915	20,195	187,443	40,056	219	196,760	4,089	154,111	38,492	66
August	247,645	18,446	187,637	41,352	208	196,592	3,378	153,824	39,326	63
September	213,008	18,180	155,034	39,666	128	168,363	4,101	126,811	37,399	52
October	203,009	17,955	148,452	36,492	110	158,978	3,905	121,388	33,636	49
November	200,258	16,857	145,850	37,438	112	157,596	4,141	118,703	34,701	51
December	220,500	21,087	157,285	42,006	123	172,292	5,368	127,585	39,285	55
Total	2,572,127	249,695	1,865,463	455,270	1,685	2,022,260	58,253	1,531,106	432,239	649
YEAR—1986										
January	217,470	21,377	159,733	36,219	139	170,455	5,696	131,031	33,664	63
February	192,336	23,222	136,288	32,721	104	149,192	6,249	112,985	29,916	41
March	196,834	28,465	137,487	30,773	107	150,144	7,632	113,693	28,777	40
April	186,074	27,523	127,966	30,477	106	141,097	7,114	105,767	28,176	39
May	197,315	27,205	138,065	31,924	118	151,611	6,539	114,682	30,347	42
June	215,015	26,223	157,305	31,334	151	166,336	6,235	130,792	29,262	46
July	242,672	24,072	182,505	35,894	199	189,342	4,980	150,568	33,742	50
August	225,166	21,189	166,337	37,483	155	176,273	4,548	136,719	34,950	55
September	206,692	21,114	148,849	36,593	135	161,017	4,669	122,316	33,977	54
October	197,754	21,335	140,095	36,214	108	154,504	5,464	114,960	34,034	44
November	196,432	23,153	138,220	34,944	114	153,142	5,779	114,446	32,872	43
December	213,551	25,965	148,002	39,463	120	165,086	6,452	121,791	36,796	48
Total	2,487,310	290,844	1,780,853	414,038	1,556	1,928,199	71,356	1,469,751	386,513	565
YEAR—1985										
January	227,856	27,543	163,973	36,186	153	173,754	6,008	137,349	30,337	59
February	198,242	25,902	141,403	30,812	123	150,552	5,918	118,997	25,587	50
March	194,970	24,640	139,178	31,041	110	150,720	6,342	117,443	26,888	47
April	184,877	24,403	133,907	26,458	107	142,462	6,713	112,093	23,612	43
May	196,790	26,421	141,551	28,697	119	150,762	6,388	117,461	26,872	40
June	205,363	23,839	150,535	30,837	150	158,780	5,089	124,909	28,736	44
July	226,722	21,293	170,058	35,184	187	177,[illegible]	4,320	141,397	31,960	52
August	226,050	19,981	171,059	34,812	196	179,285	4,188	142,921	32,121	54
September	202,499	18,767	149,067	34,508	155	161,226	4,363	124,243	32,577	43
October	194,789	20,048	143,409	31,205	126	154,363	5,070	119,464	29,783	45
November	192,427	22,954	139,203	30,166	104	148,991	5,905	114,892	28,151	42
December	219,255	25,359	159,980	33,782	133	169,408	6,029	132,181	31,146	51
Total	2,469,841	281,149	1,803,323	383,691	1,662	1,918,032	66,334	1,503,349	347,769	570
YEAR—1984										
January	216,632	29,737	157,394	29,313	187	165,365	8,341	132,447	24,520	57
February	189,564	27,900	133,088	28,436	140	143,645	7,596	112,405	23,603	41
March	200,107	30,435	142,190	27,345	136	152,991	8,423	121,129	23,395	45
April	181,084	29,970	126,769	24,231	114	136,883	8,807	107,688	20,352	35
May	192,217	31,814	134,410	25,867	126	144,934	8,905	114,419	21,570	38
June	209,648	28,773	155,383	25,299	192	158,914	7,308	130,490	21,058	58
July	221,245	27,495	165,254	28,284	212	168,420	6,456	138,650	23,258	55
August	229,296	25,137	174,417	29,493	247	177,577	5,811	146,891	24,811	63
September	195,198	20,911	144,985	29,146	155	151,564	4,824	121,751	24,946	41
October	190,936	20,887	145,149	24,774	126	149,581	5,166	122,180	22,190	44
November	190,380	22,259	143,404	24,575	141	146,962	5,508	120,193	21,206	55
December	199,996	25,834	143,166	30,872	124	152,080	6,494	119,595	25,941	49
Total	2,416,304	321,150	1,765,608	327,634	1,901	1,848,916	83,639	1,487,840	276,849	579

Note: Total may not equal sum of components due to independent rounding.

** Total includes generation by wind; Total Electric Utility Industry (1984)—6.5 kWh in millions; Investor-Owned Utilities—3.5 kWh in millions; Total Electric Utility Industry (1985)—5.8 kWh in millions; Investor-Owned Utilities—2.8 kWh in millions; Total Electric Utility Industry (1986)—4.2 kWh in millions; Investor-Owned Utilities—2.8 kWh in millions; Total Electric Utility Industry (1987)—3.5 kWh in millions; Investor-Owned Utilities—3.7 kWh in millions. Total includes generation by solar; Total Electric Utility Industry (1984)—5.2 kWh in millions; Investor-Owned Utilities—5.0 kWh in millions; Total Electric Utility Industry (1985)—10.6 kWh in millions; Investor-Owned Utilities—8.8 kWh in millions; Total Electric Utility Industry (1986)—14.0 kWh in millions; Investor-Owned Utilities—10.4 kWh in millions; Total Electric Utility Industry (1987)—10.5 kWh in millions; Investor-Owned Utilities—8.2 kWh in millions.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 18

INDEX OF WEEKLY ELECTRIC OUTPUT TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)
SEASONALLY ADJUSTED—1967 AVERAGE = 100
1977-1987

Week Number	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
1	208	212	199	201	169	176	180	179	199	184	181
2	204	210	202	192	174	179	189	178	192	184	182
3	202	199	207	204	176	205	197	170	189	184	191
4	213	194	219	195	188	193	185	176	186	182	193
5	219	215	209	190	182	190	182	194	201	193	187
6	200	196	213	190	177	183	191	190	198	185	183
7	208	220	206	177	186	192	192	188	196	180	176
8	223	210	200	187	183	182	176	185	194	183	177
9	221	216	201	206	184	193	187	200	196	187	174
10	212	213	206	207	185	196	193	204	191	186	177
11	217	206	202	205	186	194	192	196	194	176	170
12	218	213	207	202	189	192	198	195	189	170	171
13	209	203	204	195	201	195	195	196	193	170	176
14	223	201	204	203	195	195	189	191	194	173	171
15	216	208	204	203	196	201	193	188	193	174	172
16	211	210	205	202	200	193	195	195	191	180	174
17	216	213	215	206	191	192	195	188	188	177	170
18	219	214	211	206	191	187	198	187	186	177	175
19	219	216	213	208	191	187	193	187	196	180	174
20	221	215	216	205	190	189	192	185	188	181	183
21	226	208	208	208	190	192	188	182	181	182	179
22	227	214	212	199	187	187	192	185	181	187	179
23	228	217	222	214	188	191	198	193	191	183	177
24	220	218	212	220	198	187	204	180	183	178	176
25	235	213	203	215	193	182	205	179	184	179	174
26	230	217	206	209	194	179	200	192	177	188	177
27	223	213	201	205	190	179	194	192	173	175	181
28	226	219	214	212	200	190	202	197	182	179	184
29	211	212	198	192	201	182	195	202	184	187	187
30	232	217	196	194	199	190	194	194	189	185	170
31	230	215	194	192	202	187	185	194	193	178	175
32	232	203	197	206	199	189	192	204	198	183	182
33	223	205	211	214	207	186	198	201	173	193	167
34	234	214	202	206	215	190	186	196	184	185	163
35	212	196	200	207	205	184	188	194	185	180	173
36	209	194	215	196	211	196	197	201	192	185	172
37	222	207	218	213	204	177	187	200	188	193	173
38	229	210	203	199	195	196	193	198	181	197	177
39	219	230	207	206	189	182	189	203	186	183	180
40	222	236	205	197	197	184	195	192	191	186	175
41	216	215	208	202	194	192	194	186	190	184	176
42	215	210	212	206	198	184	194	188	192	185	176
43	216	207	209	207	197	186	194	189	193	185	173
44	218	207	206	208	197	165	193	194	191	185	173
45	215	213	209	205	199	186	188	187	190	182	174
46	218	221	208	206	201	184	188	188	191	186	177
47	221	222	214	204	191	191	192	201	177	194	170
48	212	207	209	208	205	179	187	190	194	181	186
49	213	213	215	212	199	174	184	184	188	187	185
50	212	219	211	199	195	179	189	185	181	192	177
51	220	213	221	191	212	189	196	192	189	184	172
52	215	209	215	190	229	186	198	199	174	184	181
Year	**218**	**211**	**208**	**202**	**195**	**184**	**192**	**191**	**189**	**183**	**177**

Note: Seasonal factors are always based on 52 weeks ending on Saturday. Therefore one week is eliminated in 1977 and 1983, since those years had 53 Saturdays.
The above values are based on EEI Weekly Electric Output Index—(Revised Methodology) dated January, 1958.

TABLE 19

WEEKLY ELECTRIC OUTPUT—TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)

1985-1987—KILOWATTHOURS IN MILLIONS

Week Ended	1987	Week Ended	1986	Percent Change 87/86	Week Ended	1985	Percent Change 86/85
Jan 3	47,420	Jan 4	48,274	(1.8)	Jan 5	45,541	6.0
10	50,921	11	52,092	(2.2)	12	50,657	2.8
17	51,333	18	50,349	2.0	19	52,261	(3.7)
24	53,867	25	48,516	11.0	26	54,739	(11.4)
31	54,077						
		Feb 1	52,327	3.3	Feb 2	52,083	0.5
Feb 7	49,594	8	48,016	3.3	9	53,507	(10.3)
14	50,131	15	52,558	(4.6)	16	50,916	3.2
21	51,096	22	47,748	7.0	23	46,797	2.0
28	50,075						
		Mar 1	48,914	2.4	Mar 2	45,239	8.1
Mar 7	47,967	8	48,297	(0.7)	9	45,886	5.3
14	48,305	15	46,060	4.9	16	44,733	3.0
21	47,474	22	46,359	2.4	23	44,913	3.2
28	45,561	29	44,168	3.2	30	44,233	(0.1)
Apr 4	47,681	Apr 5	42,906	11.1	Apr 6	43,447	(1.2)
11	45,955	12	44,319	3.7	13	43,336	2.3
18	44,869	19	44,467	0.9	20	43,463	2.3
25	45,536	26	44,483	2.4	27	44,467	0.0
May 2	46,419	May 3	44,868	3.5	May 4	43,927	2.1
9	46,849	10	45,816	2.3	11	44,547	2.8
16	48,064	17	46,208	4.0	18	45,922	0.6
23	49,857	24	45,766	8.9	25	45,169	1.3
30	49,922	31	46,738	6.8			
					June 1	45,806	2.0
June 6	52,952	June 7	49,672	6.6	8	49,819	(0.3)
13	52,725	14	51,620	2.1	15	49,086	5.2
20	56,914	21	51,977	9.5	22	48,948	6.2
27	56,373	28	53,573	5.2	29	50,259	6.6
July 4	52,808	July 5	50,884	3.8	July 6	47,698	6.7
11	57,302	12	55,347	3.5	13	53,502	3.4
18	56,228	19	56,973	(1.3)	20	53,814	5.9
25	60,564	26	57,324	5.7	27	52,399	9.4
Aug. 1	59,685	Aug. 2	56,713	5.2	Aug. 3	51,736	9.6
8	60,700	9	53,778	12.9	10	52,219	3.0
15	57,661	16	52,404	10.0	17	53,800	(2.6)
22	59,117	23	53,802	9.9	24	51,073	5.3
29	54,284	30	49,898	8.8	31	51,006	(2.2)
Sept. 5	51,362	Sept. 6	46,845	9.6	Sept. 7	52,202	(10.3)
12	51,078	13	47,719	7.0	14	50,060	(4.7)
19	51,768	20	47,690	8.6	21	46,023	3.6
26	47,776	27	50,370	(5.1)	28	45,180	11.5
Oct. 3	47,475	Oct. 4	50,642	(6.3)	Oct. 5	44,052	15.0
10	46,008	11	45,800	0.5	12	44,305	3.4
17	45,904	18	44,766	2.5	19	45,236	(1.0)
24	46,330	25	44,409	4.3	26	44,696	(0.6)
31	46,974						
		Nov. 1	44,823	4.8	Nov. 2	44,455	0.8
Nov. 7	46,441	8	45,978	1.0	9	44,945	2.3
14	48,269	15	48,954	(1.4)	16	46,055	6.3
21	48,644	22	48,772	(0.3)	23	47,026	3.7
28	46,997	29	45,918	2.3	30	46,320	(0.9)
Dec. 5	50,330	Dec. 6	49,480	1.7	Dec. 7	50,547	(2.1)
12	50,437	13	51,328	(1.7)	14	50,392	1.9
19	53,584	20	50,956	5.2	21	54,033	(5.7)
26	49,169	27	47,024	4.6	28	49,369	(4.7)

Note: "Weekly Electric Output" is the total of that reported by the individual utilities which consists of the net electric energy generated by each respondent utility plus energy received from others less energy delivered for resale.

These figures are based on the reports of investor-owned utilities, large municipal systems, and state and Federal agencies comprising 93 percent of the total. They are then expanded to an estimated full coverage of the contiguous United States. As these data are for 52 weeks rather than for the calendar year and include net imports and purchases from industrial plants they do not add to totals for the electric utility industry shown in other tables.

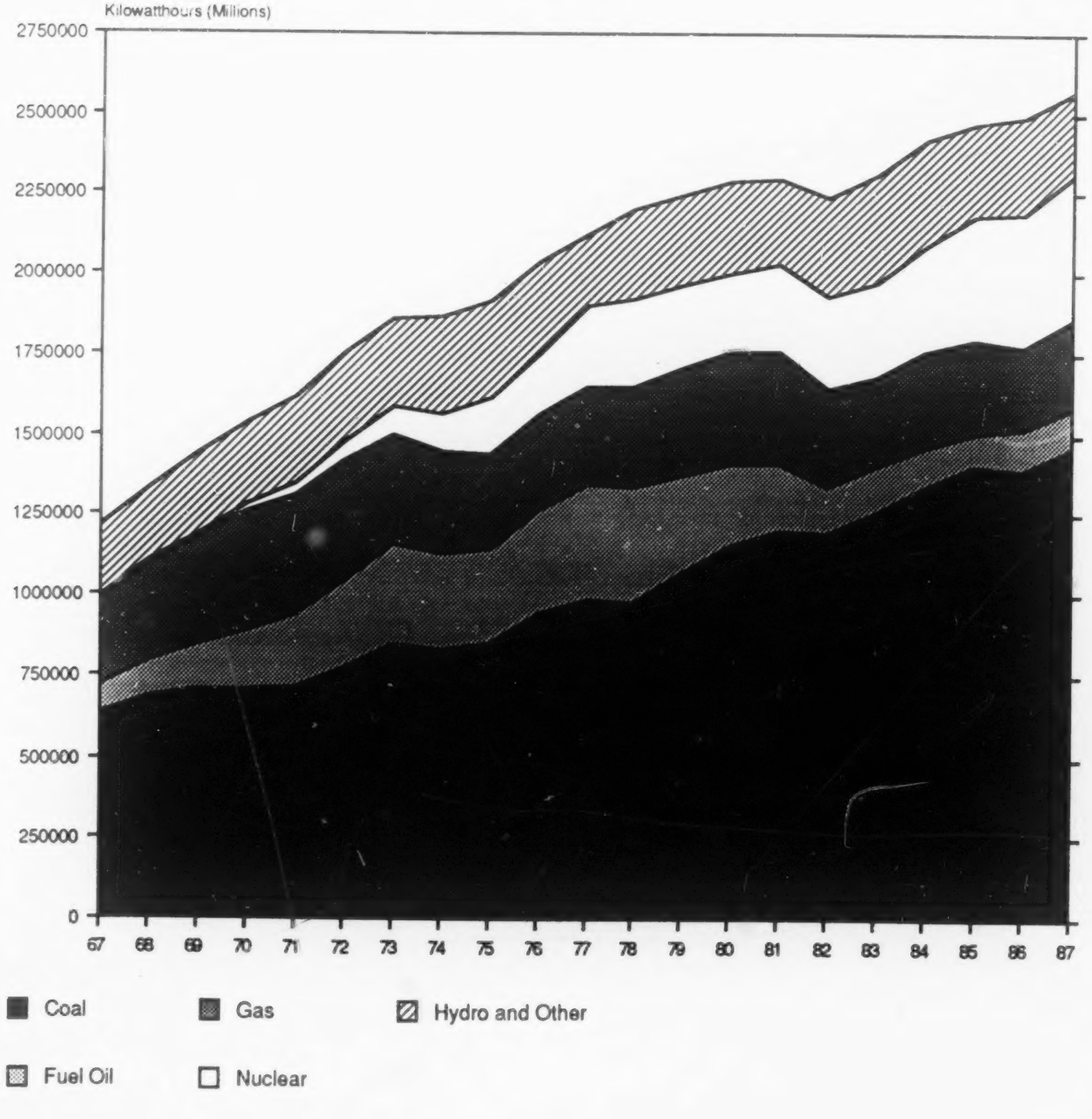
FUEL

SECTION IV

CHART IV-A

ELECTRIC POWER GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY
BY SOURCE



Based on Table 21, page 30.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 21

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY*

BY YEAR AND ENERGY SOURCE
KILOWATTHOURS IN MILLIONS

Year	Total Generation	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other**
1987	**2,572,127**	**1,463,781**	**118,493**	**272,621**	**455,270**	**249,695**	**12,267**
1986	2,487,310	1,385,831	136,585	248,508	414,038	290,844	11,503
1985	2,469,841	1,402,128	100,202	291,946	383,691	281,149	10,724
1984	2,416,304	1,341,681	119,808	297,394	327,634	321,150	8,638
1983	2,310,285	1,259,424	144,499	274,098	293,677	332,130	6,456
1982	2,241,211	1,192,379	146,423	305,260	282,773	309,213	5,164
1981	2,294,812	1,203,554	206,070	345,777	272,674	260,684	6,054
1980	2,286,414	1,161,969	245,547	346,233	251,121	276,039	5,506
1979	2,247,359	1,075,595	302,948	329,486	255,155	279,790	4,387
1978	2,206,313	976,618	364,153	305,392	276,403	280,432	3,315
1977	2,124,166	985,465	357,866	305,444	250,882	220,446	4,063
1976	2,037,674	944,562	319,779	294,610	191,107	283,734	3,883
1975	1,917,619	852,972	288,873	299,766	172,506	300,065	3,437
1974	1,866,436	829,842	299,306	319,931	113,727	300,928	2,703
1973	1,856,216	845,704	312,805	340,449	83,334	271,634	2,290
1972	1,749,637	772,871	272,530	375,735	54,092	272,626	1,783
1971	1,612,589	714,676	218,608	374,026	38,106	266,314	859
1970	1,531,609	706,102	182,488	372,884	21,797	247,456	882
1969	1,442,182	706,001	137,847	333,279	13,928	250,193	934
1968	1,329,443	684,905	104,276	304,433	12,528	222,491	810
1967	1,214,365	630,483	89,271	264,806	7,655	221,518	632

Note: Total may not equal sum of components due to independent rounding.

**Generation by petroleum coke included in fuel oil from 1967 to 1980, and 1983 to 1987. In 1981 and 1982 petroleum coke included in coal.*

***Includes generation by geothermal, wood, waste, wind and solar.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 22

SOURCES OF ENERGY FOR ELECTRIC GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND ENERGY SOURCE

Year	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other
1987	**56.9%**	**4.6%**	**10.6%**	**17.7%**	**9.7%**	**0.5%**
1986	55.7	5.5	10.0	16.6	11.7	0.5
1985	56.8	4.1	11.8	15.5	11.4	0.4
1984	55.5	5.0	12.3	13.6	13.3	0.4
1983	54.5	6.3	11.9	12.7	14.4	0.3
1982	53.2	6.5	13.6	12.6	13.8	0.2
1981	52.4	9.0	15.1	11.9	11.4	0.3
1980	50.8	10.7	15.1	11.0	12.1	0.2
1979	47.9	13.5	14.7	11.4	12.4	0.2
1978	44.3	16.5	13.8	12.5	12.7	0.2
1977	46.4	16.8	14.4	11.8	10.4	0.2
1976	46.4	15.7	14.5	9.4	13.9	0.2
1975	44.5	15.1	15.6	9.0	15.6	0.2
1974	44.5	16.0	17.1	6.1	16.1	0.1
1973	45.6	16.9	18.3	4.5	14.6	0.1
1972	44.2	15.6	21.5	3.1	15.6	0.1
1971	44.3	13.6	23.2	2.4	16.5	0.1
1970	46.1	11.9	24.3	1.4	16.2	0.1
1969	49.0	9.6	23.1	1.0	17.3	0.1
1968	51.5	7.8	22.9	0.9	16.7	0.1
1967	51.9	7.4	21.8	0.6	18.2	0.1

Note: Total may not equal sum of components due to independent rounding.

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759), as shown in Table 21.*

TABLE 23

SOURCES OF ENERGY FOR ELECTRIC GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1987—KILOWATTHOURS IN MILLIONS

Division State	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**2,572,127**	**1,463,781**	**118,493**	**272,821**	**455,270**	**249,695**	**12,267**
Maine	8,346	—	2,600	—	4,043	1,703	—
New Hampshire	6,045	3,053	2,094	1	—	896	—
Vermont	4,634	—	17	—	3,536	925	156
Massachusetts	34,735	11,681	18,069	3,602	1,136	247	—
Rhode Island	837	—	402	434	—	—	—
Connecticut	33,173	1,940	9,648	707	20,540	337	—
New England	**87,769**	**16,674**	**32,831**	**4,744**	**29,256**	**4,109**	**156**
New York	117,630	19,384	31,389	16,385	22,926	27,546	*
New Jersey	39,324	7,425	3,131	6,384	22,697	(312)	—
Pennsylvania	145,363	101,403	7,683	164	34,982	1,131	—
Middle Atlantic	**302,317**	**120,211**	**42,202**	**22,933**	**80,606**	**28,365**	*
Ohio	119,661	111,233	278	60	7,513	225	352
Indiana	78,575	77,620	342	107	—	507	—
Illinois	109,887	57,933	1,465	205	50,194	90	—
Michigan	87,035	71,135	718	428	14,389	364	—
Wisconsin	44,030	31,032	74	140	11,311	1,319	154
East North Central	**439,189**	**348,954**	**2,877**	**940**	**83,407**	**2,505**	**506**
Minnesota	34,406	21,627	37	427	11,554	720	41
Iowa	25,549	21,704	48	238	2,523	970	67
Missouri	55,087	47,170	86	100	6,284	1,447	—
North Dakota	22,620	20,618	19	*	—	1,982	*
South Dakota	6,265	905	3	3	—	5,354	—
Nebraska	20,489	10,153	47	133	8,589	1,567	—
Kansas	30,822	23,075	73	1,194	6,471	9	*
West North Central	**195,238**	**145,252**	**314**	**2,094**	**35,421**	**12,050**	**108**
Delaware	8,511	5,881	1,837	792	—	—	—
Maryland	36,251	21,003	2,591	924	10,070	1,612	51
District of Columbia	233	—	233	—	—	—	—
Virginia	42,697	20,621	2,961	163	18,145	807	—
West Virginia	78,372	77,773	262	22	—	315	—
North Carolina	78,825	44,836	225	66	28,600	5,098	—
South Carolina	64,410	22,861	70	30	39,290	2,160	—
Georgia	85,806	67,185	184	57	15,259	3,121	—
Florida	110,765	54,640	20,628	16,507	18,773	217	—
South Atlantic	**505,870**	**314,800**	**28,991**	**18,561**	**130,137**	**13,330**	**51**
Kentucky	67,454	64,352	121	32	—	2,948	—
Tennessee	58,312	50,730	124	*	(108)	7,566	—
Alabama	69,336	50,501	31	108	11,248	7,449	—
Mississippi	22,388	11,094	80	3,497	7,717	—	—
East South Central	**217,490**	**176,677**	**356**	**3,638**	**18,857**	**17,962**	**—**
Arkansas	36,287	19,373	5	3,132	11,369	2,407	—
Louisiana	51,309	15,102	60	23,823	12,324	—	—
Oklahoma	42,737	21,089	30	18,670	—	2,948	—
Texas	212,620	106,405	551	103,272	—	2,158	233
West South Central	**342,952**	**161,969**	**646**	**148,897**	**23,693**	**7,513**	**233**
Montana	20,884	11,836	17	58	—	8,925	49
Idaho	8,105	—	*	*	—	8,105	—
Wyoming	37,370	36,535	59	9	—	768	(*)
Colorado	28,810	26,192	19	605	174	1,818	2
New Mexico	25,585	23,628	36	1,756	—	164	—
Arizona	51,600	25,344	226	2,452	13,458	10,119	—
Utah	26,346	25,221	92	13	—	856	164
Nevada	17,442	14,076	249	591	—	2,526	—
Mountain	**216,143**	**162,834**	**698**	**5,484**	**13,632**	**33,281**	**215**
Washington	83,756	8,166	8	7	5,528	69,698	348
Oregon	39,739	(33)	(6)	—	4,348	35,431	—
California	130,344	—	2,095	62,660	30,387	24,564	10,637
Pacific	**253,839**	**8,133**	**2,097**	**62,668**	**40,263**	**129,693**	**10,985**
Alaska	4,122	277	312	2,662	—	872	—
Hawaii	7,197	—	7,169	*	—	15	13
Alaska & Hawaii	**11,319**	**277**	**7,480**	**2,662**	**—**	**887**	**13**

Note: Total may not equal sum of components due to independent rounding.

† Excludes petroleum coke.

†† Includes petroleum coke.

** Less than five hundred thousand kilowatthours.*

*** Includes generation by geothermal, wood, waste, wind and solar.*

( ) Denotes negative figure.

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 24

SOURCES OF ENERGY FOR ELECTRIC GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1987—PERCENT

Division/State	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**100.0%**	**56.9%**	**4.6%**	**10.6%**	**17.7%**	**9.7%**	**0.5%**
Maine	100.0	—	31.2	—	48.4	20.4	—
New Hampshire	100.0	50.5	34.6	*	—	14.8	—
Vermont	100.0	—	0.4	—	76.3	20.0	3.4
Massachusetts	100.0	33.6	52.0	10.4	3.3	0.7	—
Rhode Island	100.0	—	48.1	51.9	—	—	—
Connecticut	100.0	5.8	29.1	2.1	61.9	1.0	—
New England	**100.0**	**19.0**	**37.4**	**5.4**	**33.3**	**4.7**	**0.2**
New York	100.0	16.5	26.7	13.9	19.5	23.4	*
New Jersey	100.0	18.9	8.0	16.2	57.7	(0.8)	—
Pennsylvania	100.0	69.8	5.3	0.1	24.1	0.8	—
Middle Atlantic	**100.0**	**42.4**	**14.0**	**7.6**	**26.7**	**9.4**	*
Ohio	100.0	93.0	0.2	0.1	6.3	0.2	0.3
Indiana	100.0	98.8	0.4	0.1	—	0.6	
Illinois	100.0	52.7	1.3	0.2	45.7	0.1	—
Michigan	100.0	81.7	0.8	0.5	16.5	0.4	—
Wisconsin	100.0	70.5	0.2	0.3	25.7	3.0	0.4
East North Central	**100.0**	**79.5**	**0.7**	**0.2**	**19.0**	**0.6**	**0.1**
Minnesota	100.0	62.9	0.1	1.2	33.6	2.1	0.1
Iowa	100.0	84.9	0.2	0.9	9.9	3.8	0.3
Missouri	100.0	85.6	0.2	0.2	11.4	2.6	—
North Dakota	100.0	91.2	0.1	*	—	8.8	*
South Dakota	100.0	14.4	0.1	*	—	85.5	—
Nebraska	100.0	49.6	0.2	0.7	41.9	7.6	—
Kansas	100.0	74.9	0.2	3.9	21.0	*	*
West North Central	**100.0**	**74.4**	**0.2**	**1.1**	**18.1**	**6.2**	**0.1**
Delaware	100.0	69.1	21.6	9.3	—	—	—
Maryland	100.0	57.9	7.1	2.5	27.8	4.4	0.1
District of Columbia	100.0	—	100.0	—	—	—	—
Virginia	100.0	48.3	6.9	0.4	42.5	1.9	—
West Virginia	100.0	99.2	0.3	*	—	0.4	—
North Carolina	100.0	56.9	0.3	0.1	36.3	6.5	—
South Carolina	100.0	35.5	0.1	*	61.0	3.4	—
Georgia	100.0	78.3	0.2	0.1	17.8	3.6	—
Florida	100.0	49.3	18.6	14.9	16.9	0.2	—
South Atlantic	**100.0**	**62.2**	**5.7**	**3.7**	**25.7**	**2.6**	*
Kentucky	100.0	95.4	0.2	*	—	4.4	—
Tennessee	100.0	87.0	0.2	*	(0.2)	13.0	—
Alabama	100.0	72.8	*	0.2	16.2	10.7	—
Mississippi	100.0	49.6	0.4	15.6	34.5	—	—
East South Central	**100.0**	**81.2**	**0.2**	**1.7**	**8.7**	**8.3**	—
Arkansas	100.0	53.4	*	8.6	31.3	6.6	—
Louisiana	100.0	29.4	0.1	46.4	24.0	—	—
Oklahoma	100.0	49.3	0.1	43.7	—	6.9	—
Texas	100.0	50.0	0.3	48.6	—	1.0	0.1
West South Central	**100.0**	**47.2**	**0.2**	**43.4**	**6.9**	**2.2**	**0.1**
Montana	100.0	56.7	0.1	0.3	—	42.7	0.2
Idaho	100.0	—	*	*	—	100.0	—
Wyoming	100.0	97.8	0.2	*	—	2.1	(*)
Colorado	100.0	90.9	0.1	2.1	0.6	6.3	*
New Mexico	100.0	92.4	0.1	6.9	—	0.6	—
Arizona	100.0	49.1	0.4	4.8	26.1	19.6	—
Utah	100.0	95.7	0.3	*	—	3.2	0.6
Nevada	100.0	80.7	1.4	3.4	—	14.5	—
Mountain	**100.0**	**75.3**	**0.3**	**2.5**	**6.3**	**15.4**	**0.1**
Washington	100.0	9.7	*	*	6.6	83.2	0.4
Oregon	100.0	(0.1)	(*)	—	10.9	89.2	—
California	100.0	—	1.6	48.1	23.3	18.8	8.2
Pacific	**100.0**	**3.2**	**0.8**	**24.7**	**15.9**	**51.1**	**4.3**
Alaska	100.0	6.7	7.6	64.6	—	21.1	—
Hawaii	100.0	—	99.6	*	—	0.2	0.2
Alaska & Hawaii	**100.0**	**2.5**	**66.1**	**23.5**	—	**7.8**	**0.1**

Note: Total may not equal sum of components due to independent rounding.
†Excludes petroleum coke.
††Includes petroleum coke.
**Less than one tenth of one percent.*
***Includes generation by geothermal, wood, waste, wind and solar.*
( ) Denotes negative figure.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759), as shown in Table 23.*

TABLE 28

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND KIND OF FUEL

Year	Coal* (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents**† (Thousand Short Tons)	Net Generation by Fuels** (kWh in Millions)	Heat Rate† (Btu per kWh)	Lbs. of Coal per kWh†
1987	**717,894**	**199,378**	**2,844,051**	**944,420‡**	**1,854,895**	**10,354**	**0.981**
1986	685,056	230,482	2,602,370	907,720‡	1,770,925	10,423	0.989
1985	693,841	173,414	3,044,083	926,793‡	1,794,276	10,429	0.990
1984	664,399	204,479	3,111,342	909,156‡	1,758,882	10,385	0.990
1983	625,211	245,497	2,910,767	867,621‡	1,678,021	10,547	0.993
1982	593,666	249,771	3,225,518	858,869‡	1,644,062	10,517	0.996
1981	596,936	351,111	3,640,154	922,133‡	1,755,401	10,506	0.992
1980	569,453	420,214	3,681,595	916,952‡	1,753,749	10,489	0.980
1979	527,317	523,256	3,490,517	837,371	1,708,029	10,470	0.981
1978	481,624	635,829	3,188,370	811,814	1,646,163	10,495	0.986
1977	477,215	623,656	3,190,571	798,425	1,648,775	10,449	0.969
1976	448,431	555,583	3,080,627	740,112	1,558,951	10,369	0.950
1975	406,032	506,081	3,157,591	686,236	1,441,611	10,383	0.952
1974	392,344	536,140	3,429,072	685,115	1,449,079	10,481	0.946
1973	388,190	559,842	3,640,756	688,043	1,498,958	10,429	0.918
1972	352,391	493,663	3,976,762	647,968	1,421,136	10,479	0.912
1971	327,878	396 438	3,975,972	599,766	1,307,310	10,536	0.918
1970	320,818	335,504	3,931,996	573,152	1,261,474	10,508	0.909
1969	310,641	251,027	3,487,642	517,937	1,177,127	10,457	0.880
1968	297,779	188,642	3,147,909	475,475	1,093,614	10,371	0.870
1967	274,185	161,278	2,746,352	428,165	984,560	10,396	0.870

*Beginning in 1982, petroleum coke excluded from Coal.

**Excludes geothermal, wood, waste, and nuclear fuels.

†EEI estimate.

‡Beginning in 1980, Coal Equivalents are calculated on the basis of Btu instead of generation data.

Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. (EIA-759).

TABLE 26

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND KIND OF FUEL—YEAR 1987

Division/State	Coal (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents†‡ (Thousand Short Tons)	Net Generation by Fuels† (kWh in Millions)	Heat Rate‡ (Btu per kWh)	Lbs. of Coal per kWh‡
Total United States	**717,894**	**199,378**	**2,844,051**	**944,420**	**1,854,895**	**10,354**	**0.981**
Maine	–	4,351	–	1,040	2,600	10,607	–
New Hampshire	1,163	3,576	15	2,032	5,149	[illegible]	0.762
Vermont	–	71	–	16	17	15,390	–
Massachusetts	4,267	28,739	40,183	12,768	33,351	10,005	0.731
Rhode Island	–	832	5,336	415	837	12,890	–
Connecticut	787	15,732	7,350	4,804	12,295	10,370	0.811
New England	**6,217**	**53,302**	**52,884**	**21,074**	**54,249**	**10,212**	**0.746**
New York	7,828	52,538	173,328	27,747	67,158	10,438	0.808
New Jersey	3,081	5,695	75,138	7,441	16,939	11,248	0.830
Pennsylvania	41,263	12,797	1,993	44,556	109,250	10,129	0.814
Middle Atlantic	**52,172**	**71,030**	**250,458**	**79,744**	**193,346**	**10,332**	**0.814**
Ohio	47,520	608	871	47,709	111,571	10,166	0.854
Indiana	36,987	352	1,315	37,142	78,068	10,363	0.953
Illinois	28,894	3,660	3,172	30,146	59,604	10,734	0.997
Michigan	30,854	1,522	10,754	31,404	72,281	10,075	0.867
Wisconsin	17,579	173	2,176	17,745	31,247	10,882	1.133
East North Central	**161,833**	**6,315**	**18,288**	**164,146**	**352,771**	**10,350**	**0.928**
Minnesota	13,495	101	5,700	13,856	22,091	10,792	1.248
Iowa	12,997	115	3,265	13,210	21,989	11,010	1.198
Missouri	23,012	232	1,379	23,142	47,356	10,332	0.976
North Dakota	17,434	50	3	17,457	20,638	11,784	1.691
South Dakota	865	23	77	881	911	12,493	1.912
Nebraska	6,428	92	1,743	6,558	10,333	10,895	1.266
Kansas	14,942	156	16,074	15,890	24,342	11,631	1.295
West North Central	**89,174**	**770**	**28,241**	**90,994**	**147,660**	**10,969**	**1.228**
Delaware	2,449	2,596	7,847	3,373	8,511	10,849	0.833
Maryland	8,228	5,170	11,757	9,975	24,518	10,273	0.784
District of Columbia	–	616	–	148	233	15,805	–
Virginia	8,297	4,599	1,724	9,481	23,745	10,102	0.805
West Virginia	30,605	383	239	30,695	78,057	9,691	0.787
North Carolina	17,255	435	1,162	17,403	45,127	9,695	0.770
South Carolina	9,019	116	538	9,068	22,960	9,937	0.789
Georgia	27,130	361	826	27,256	67,425	9,806	0.808
Florida	22,598	33,694	175,675	38,581	91,775	10,167	0.827
South Atlantic	**125,582**	**47,970**	**199,769**	**145,980**	**362,352**	**9,947**	**0.798**
Kentucky	28,569	225	336	28,640	64,506	10,300	0.888
Tennessee	20,697	222	–	20,751	50,854	9,777	0.816
Alabama	20,746	58	1,474	20,820	50,840	10,112	0.822
Mississippi	4,562	188	41,119	6,284	14,671	10,762	0.822
East South Central	**74,573**	**694**	**42,930**	**76,495**	**180,671**	**10,137**	**0.844**
Arkansas	11,764	10	32,057	13,709	22,510	10,399	1.214
Louisiana	10,029	118	246,912	26,338	38,985	10,712	1.328
Oklahoma	12,861	68	187,895	24,056	39,789	10,628	1.220
Texas	78,802	1,073	1,049,804	153,544	210,229	10,405	1.481
West South Central	**113,455**	**1,270**	**1,516,669**	**217,647**	**311,512**	**10,470**	**1.401**
Montana	7,530	44	478	7,579	11,911	10,933	1.272
Idaho	–	*	4	1	**	12,809	–
Wyoming	22,408	115	90	22,452	36,603	10,712	1.227
Colorado	14,178	90	7,826	14,582	26,816	10,699	1.083
New Mexico	14,340	83	18,454	15,421	25,421	10,916	1.214
Arizona	12,706	432	26,665	14,126	28,023	10,726	1.003
Utah	11,175	187	263	11,234	25,326	10,315	0.886
Nevada	6,807	459	7,076	7,266	14,916	10,968	0.967
Mountain	**89,145**	**1,411**	**60,855**	**92,662**	**169,016**	**10,720**	**1.095**
Washington	5,468	18	93	5,481	8,182	10,513	1.339
Oregon	–	2	–	1	(39)	–	–
California	–	3,674	643,335	42,824	64,755	10,474	–
Pacific	**5,468**	**3,694**	**643,428**	**48,305**	**72,898**	**10,478**	**1.345**
Alaska	274	727	30,530	2,512	3,251	12,670	1.978
Hawaii	–	12,196	***	4,860	7,169	10,598	–
Alaska & Hawaii	**274**	**12,923**	**30,530**	**7,373**	**10,420**	**11,214**	**1.978**

Note: Total may not equal sum of components due to independent rounding.

†Excludes geothermal, wood, waste, and nuclear fuels.

‡EEI estimate.

**Less than five hundred 42 gallon barrels.*

***Less than five hundred thousand kilowatthours.*

****Less than five hundred thousand cubic feet. ( ) Denotes negative figure.*

Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 27

ANALYSIS OF FUEL FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES 1984-1987 BY GEOGRAPHIC DIVISION

		Composite Averages			Coal (a)			Oil (b)			Gas (c)		
Division	Year	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
United States	1987	177.7¢	1.84¢	10,354	157.8¢	$33.32	10,556	304.2¢	$19.04	149,015	226.6¢	233.52¢	1,030
	1986	184.5	1.92	10,423	165.5	34.85	10,531	283.4	17.74	149,050	232.3	239.90	1,033
	1985	217.7	2.27	10,429	173.1	36.48	10,538	450.6	28.22	149,116	343.2	355.44	1,036
	1984	232.0	2.41	10,385	173.5	36.53	10,526	490.8	30.64	148,662	381.3	394.71	1,035
New England	1987	252.9	2.58	10,212	195.4	51.38	13,147	282.0	17.80	150,288	244.8	251.27	1,027
	1986	238.9	2.45	10,270	204.8	54.25	13,243	251.4	15.83	149,923	235.9	242.28	1,027
	1985	354.3	3.66	10,334	217.7	57.53	13,211	428.4	27.05	150,309	346.8	359.46	1,037
	1984	399.7	4.08	10,219	220.5	56.28	13,153	472.3	29.65	149,502	406.9	427.19	1,050
Middle Atlantic	1987	205.6	2.12	10,332	156.6	38.98	12,450	311.5	19.37	148,050	272.7	280.49	1,028
	1986	201.6	2.10	10,415	161.5	40.07	12,402	285.8	17.80	148,266	249.5	259.23	1,039
	1985	254.7	2.67	10,471	171.5	42.43	12,371	454.5	28.38	148,656	381.3	394.00	1,033
	1984	287.5	2.96	10,296	176.9	42.34	11,966	496.9	30.93	148,195	429.0	442.60	1,032
East North Central	1987	174.5	1.81	10,350	172.2	38.34	11,133	385.1	24.00	148,393	298.1	163.17	547
	1986	186.0	1.93	10,393	180.4	39.87	11,051	589.3	36.60	147,883	409.7	246.11	601
	1985	191.1	1.98	10,378	186.8	41.22	11,033	593.8	36.60	146,760	477.0	304.56	639
	1984	191.5	1.98	10,329	185.4	41.00	11,058	617.5	38.60	148,825	464.7	338.94	729
West North Central	1987	129.0	1.41	10,969	127.2	22.40	8,807	396.5	23.27	139,729	225.3	223.98	994
	1986	136.5	1.50	10,978	134.3	23.45	8,729	350.8	21.35	144,908	268.2	262.69	979
	1985	145.5	1.59	10,951	142.7	24.90	8,723	528.1	30.95	139,537	303.2	295.90	976
	1984	149.0	1.62	10,887	144.3	25.72	8,910	568.8	33.29	139,331	332.9	325.77	991
South Atlantic	1987	190.5	1.90	9,947	175.6	43.55	12,402	292.9	18.44	149,903	271.4	273.80	1,009
	1986	193.7	1.93	9,970	185.2	45.81	12,367	254.2	16.03	150,120	208.8	210.53	1,008
	1985	217.0	2.17	10,013	195.0	47.94	12,290	422.7	26.56	149,628	329.0	332.14	1,010
	1984	225.1	2.24	9,958	193.6	47.45	12,256	461.0	28.86	149,055	346.6	349.84	1,009
East South Central	1987	162.1	1.64	10,137	161.0	38.57	11,979	405.6	24.07	141,326	188.2	193.54	1,028
	1986	171.4	1.74	10,156	169.4	40.25	11,881	232.4	14.54	148,945	227.4	236.10	1,038
	1985	185.8	1.89	10,175	182.3	43.10	11,817	595.6	35.61	142,358	276.6	287.64	1,040
	1984	187.2	1.90	10,160	183.5	43.22	11,777	619.8	37.61	144,479	259.9	272.72	1,029
West South Central	1987	183.1	1.92	10,470	161.0	24.71	7,672	467.9	28.23	143,673	205.1	212.70	1,037
	1986	192.6	2.04	10,570	164.0	25.24	7,698	450.9	27.73	146,451	218.6	227.18	1,039
	1985	240.6	2.55	10,583	168.2	26.66	7,923	457.4	28.96	150,737	304.9	316.80	1,039
	1984	275.8	2.90	10,517	182.2	28.74	7,887	472.3	28.45	143,432	344.7	357.27	1,036
Mountain	1987	116.6	1.25	10,720	111.6	21.74	9,737	324.4	19.83	145,515	235.2	241.25	1,026
	1986	121.8	1.33	10,940	114.3	21.98	9,615	369.1	22.40	144,539	270.4	279.85	1,035
	1985	134.2	1.44	10,733	120.8	23.52	9,735	516.3	31.18	143,759	359.4	372.94	1,038
	1984	125.4	1.36	10,810	112.8	21.84	9,683	518.4	31.14	143,031	442.2	474.42	1,073
Pacific	1987	244.2	2.56	10,478	161.4	26.07	8,075	298.4	18.30	146,027	253.3	263.38	1,040
	1986	285.1	3.14	11,002	160.0	25.81	8,065	458.9	28.16	146,103	284.4	296.59	1,043
	1985	420.6	4.52	10,748	161.2	25.05	7,771	552.8	33.93	146,122	446.5	468.67	1,050
	1984	470.2	5.17	11,002	157.5	24.86	7,893	587.1	36.14	146,573	507.6	533.16	1,050
Alaska	1987	118.0	1.50	12,670	199.8	31.26	7,823	376.2	22.13	140,038	87.2	87.84	1,007
	1986	147.1	2.17	14,721	181.7	28.85	7,938	332.6	19.44	139,178	94.5	94.54	1,001
	1985	133.0	1.68	12,649	180.3	28.58	7,927	550.1	31.44	136,089	69.9	70.19	1,004
	1984	127.5	1.64	12,835	179.8	28.30	7,872	613.8	31.94	123,874	77.3	77.60	1,004
Hawaii	1987	345.2	3.66	10,598	–	–	–	345.2	21.53	148,458	–	–	–
	1986	312.2	3.29	10,551	–	–	–	312.2	19.45	148,315	–	–	–
	1985	491.6	5.15	10,474	–	–	–	491.6	30.74	148,869	–	–	–
	1984	546.6	5.75	10,517	–	–	–	546.6	34.25	149,196	–	–	–

(a) Coal includes bituminous and anthracite coal and relatively small amounts of lignite. Beginning 1984 coal excludes petroleum coke, and beginning 1985 excludes wood.

(b) Oil includes fuel oil, crude oil, and small amounts of tar and gasoline. Beginning 1984 oil includes petroleum coke.

(c) Gas includes natural and manufactured gas and waste gas.

TABLE 28

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

1984-1987 BY GEOGRAPHIC DIVISION

Division	Year	Average Cost per Million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
United States	1987	71.11¢	7.68	10,803
	1986	70.45	7.61	10,802
	1985	69.36	7.50	10,817
	1984	63.57	6.93	10,855
New England	1987	84.90	9.05	10,663
	1986	83.93	9.02	10,750
	1985	77.99	8.35	10,707
	1984	N/A	N/A	N/A
Middle Atlantic	1987	68.67	7.51	10,931
	1986	67.09	7.30	10,873
	1985	70.21	7.66	10,903
	1984	74.90	8.17	10,909
East North Central	1987	70.15	7.66	10,922
	1986	70.37	7.68	10,907
	1985	71.74	7.89	10,994
	1984	N/A	6.73	N/A
West North Central	1987	58.38	6.23	10,664
	1986	63.62	6.77	10,646
	1985	65.63	6.99	10,650
	1984	58.36	6.35	10,884
South Atlantic	1987	64.22	6.89	10,725
	1986	62.69	6.70	10,689
	1985	61.55	6.60	10,724
	1984	53.62	5.76	10,743
East South Central	1987	74.13	8.30	11,193
	1986	78.74	8.78	11,149
	1985	83.39	8.97	10,752
	1984	64.69	7.00	10,826
West South Central	1987	85.96	9.24	10,754
	1986	87.65	9.56	10,887
	1985	76.90	8.39	10,914
	1984	77.62	8.48	10,931
Mountain	1987	85.05	8.85	10,408
	1986	89.12	9.42	10,573
	1985	N/A	N/A	N/A
	1984	0.26	0.05	21,051
Pacific	1987	86.66	9.30	10,735
	1986	79.64	8.66	10,878
	1985	72.11	7.84	10,869
	1984	90.86	9.94	10,939
Alaska & Hawaii	1987	—	—	—
	1986	—	—	—
	1985	—	—	—
	1984	—	—	—

N/A Not Available.

TABLE 29

ANALYSIS OF FUEL FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES
BY STATE—YEAR 1987

	Composite Averages			Coal (a)			Oil (b)			Gas (c)		
Division/State	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
Total United States	**177.7¢**	**1.84¢**	**10,354**	**157.8¢**	**$33.32**	**10,556**	**304.2¢**	**$19.04**	**149,015**	**226.8¢**	**233.52¢**	**1,030**
Maine	290.9	3.09	10,607	—	—	—	290.9	18.28	149,590	—	—	—
New Hampshire	232.4	2.45	10,530	209.0	55.70	13,324	263.6	17.06	154,097	—	—	—
Vermont	462.7	7.12	15,390	—	—	—	462.7	26.70	137,360	—	—	—
Massachusetts	242.4	2.43	10,005	181.3	47.41	13,077	278.6	17.57	150,086	247.6	253.78	1,025
Rhode Island	247.1	3.18	12,890	—	—	—	265.7	17.31	155,099	229.6	236.70	1,031
Connecticut	280.9	2.91	10,370	250.7	66.50	13,263	290.3	18.26	149,781	240.7	248.16	1,031
New England	**252.9**	**2.58**	**10,212**	**195.4**	**51.38**	**13,147**	**282.0**	**17.80**	**150,288**	**244.8**	**251.27**	**1,027**
New York	261.6	2.73	10,438	162.8	41.24	12,663	314.7	19.56	148,021	275.5	282.70	1,026
New Jersey	245.5	2.76	11,248	188.2	48.88	12,987	323.4	20.24	148,976	266.4	275.29	1,033
Pennsylvania	163.9	1.66	10,129	153.0	37.87	12,372	294.5	18.28	147,779	285.6	293.91	1,029
Middle Atlantic	**205.6**	**2.12**	**10,332**	**156.6**	**38.98**	**12,450**	**311.5**	**19.37**	**148,050**	**272.7**	**280.49**	**1,028**
Ohio	164.0	1.67	10,166	163.5	38.83	11,875	425.4	25.19	141,002	309.7	313.12	1,011
Indiana	157.7	1.63	10,363	157.2	34.04	10,828	479.8	27.76	137,783	301.2	303.50	1,008
Illinois	221.0	2.37	10,734	214.2	45.38	10,593	410.1	26.07	151,360	327.1	334.87	1,024
Michigan	177.6	1.79	10,075	175.3	41.24	11,759	311.5	18.99	145,136	270.2	92.07	341
Wisconsin	155.4	1.69	10,882	153.6	29.41	9,571	379.4	22.01	138,106	326.4	326.33	1,000
East North Central	**174.5**	**1.81**	**10,350**	**172.2**	**38.34**	**11,133**	**385.1**	**24.00**	**148,393**	**298.1**	**163.17**	**547**
Minnesota	139.2	1.50	10,792	137.0	23.76	8,675	377.2	21.63	136,504	218.5	218.06	998
Iowa	133.9	1.47	11,010	132.1	24.31	9,197	448.5	25.99	137,971	201.1	200.77	998
Missouri	149.5	1.54	10,332	148.9	31.57	10,603	378.1	22.52	141,800	291.3	290.16	996
North Dakota	77.8	0.92	11,784	77.5	10.13	6,536	393.2	22.89	138,562	570.3	600.00	1,052
South Dakota	124.3	1.55	12,493	121.0	15.62	6,456	453.1	26.23	137,843	247.4	244.94	990
Nebraska	106.1	1.16	10,895	103.3	17.79	8,610	414.8	24.38	139,912	256.5	251.03	979
Kansas	134.8	1.57	11,631	130.6	23.29	8,915	359.0	21.46	142,344	224.9	223.43	993
West North Central	**129.0**	**1.41**	**10,969**	**127.2**	**22.40**	**8,807**	**396.5**	**23.27**	**139,729**	**225.3**	**223.98**	**994**
Delaware	213.8	2.32	10,849	188.0	49.13	13,062	292.7	18.41	149,771	271.5	270.23	995
Maryland	186.9	1.92	10,273	165.1	41.82	12,664	299.8	18.55	147,346	266.9	278.19	1,042
District of Columbia	347.5	5.49	15,805	—	—	—	347.5	20.78	142,353	—	—	—
Virginia	183.7	1.86	10,102	167.3	42.80	12,794	303.1	18.78	147,536	239.3	248.68	1,039
West Virginia	149.9	1.45	9,691	149.5	37.01	12,380	440.1	25.61	138,569	—	—	—
North Carolina	182.1	1.77	9,695	181.0	45.59	12,591	423.2	24.62	138,499	278.5	287.66	1,033
South Carolina	174.3	1.73	9,937	173.5	43.75	12,607	545.5	32.20	140,515	412.3	422.89	1,026
Georgia	187.3	1.84	9,806	186.7	45.34	12,139	335.1	20.47	145,447	351.9	360.13	1,023
Florida	233.0	2.37	10,167	200.2	48.92	12,217	287.4	18.22	150,959	271.2	273.00	1,007
South Atlantic	**190.5**	**1.90**	**9,947**	**175.6**	**43.55**	**12,402**	**292.9**	**18.44**	**149,903**	**271.4**	**273.80**	**1,009**
Kentucky	134.9	1.39	10,300	134.7	31.35	11,639	396.2	22.98	138,067	308.1	311.89	1,012
Tennessee	144.8	1.42	9,777	144.1	34.52	11,980	406.0	23.79	139,500	—	—	—
Alabama	201.3	2.04	10,112	201.1	49.47	12,301	297.2	17.17	137,555	219.6	221.73	1,010
Mississippi	203.9	2.19	10,762	207.3	52.34	12,626	490.1	30.63	148,829	187.2	192.54	1,029
East South Central	**162.1**	**1.64**	**10,137**	**161.0**	**38.57**	**11,979**	**405.6**	**24.07**	**141,326**	**188.2**	**193.54**	**1,028**
Arkansas	169.6	1.76	10,399	171.6	29.21	8,511	529.8	30.94	139,028	156.9	161.75	1,031
Louisiana	166.5	1.78	10,712	175.0	27.66	7,902	463.0	27.76	142,741	160.7	167.29	1,041
Oklahoma	199.8	2.12	10,628	148.2	26.10	8,804	258.0	15.19	140,205	260.9	273.07	1,047
Texas	184.3	1.92	10,405	160.0	23.37	7,305	475.8	28.78	143,993	206.7	213.85	1,034
West South Central	**183.1**	**1.92**	**10,470**	**161.0**	**24.71**	**7,672**	**467.9**	**28.23**	**143,673**	**205.1**	**212.70**	**1,037**
Montana	66.0	0.72	10,933	65.4	11.24	8,588	409.0	24.16	140,641	129.0	154.89	1,201
Idaho	446.7	5.72	12,809	—	—	—	557.0	32.76	140,045	417.5	425.00	1,048
Wyoming	91.1	0.98	10,712	90.6	15.81	8,721	392.9	23.06	139,774	326.0	332.22	1,039
Colorado	122.2	1.31	10,699	118.8	23.47	9,873	421.4	23.94	135,264	238.5	227.70	955
New Mexico	126.4	1.38	10,916	117.5	21.14	8,994	482.2	27.85	137,540	233.1	239.71	1,028
Arizona	147.2	1.58	10,726	134.6	28.73	10,673	471.1	29.08	146,969	231.6	240.30	1,037
Utah	115.3	1.19	10,315	114.9	26.77	11,646	401.2	23.62	140,156	1,996.3	2,158.46	1,081
Nevada	154.4	1.69	10,968	146.0	32.94	11,128	251.0	15.61	148,072	257.9	268.54	1,041
Mountain	**116.6**	**1.25**	**10,720**	**111.6**	**21.74**	**9,737**	**324.4**	**19.83**	**145,515**	**235.2**	**241.25**	**1,026**
Washington	161.8	1.70	10,513	161.4	26.07	8,075	468.0	27.54	140,135	231.5	243.07	1,050
Oregon	—	—	—	—	—	—	—	—	—	—	—	—
California	254.7	2.67	10,474	—	—	—	297.7	18.26	146,052	253.3	263.38	1,040
Pacific	**244.2**	**2.56**	**10,478**	**161.4**	**26.07**	**8,075**	**298.4**	**18.30**	**146,027**	**253.3**	**263.38**	**1,040**
Alaska	118.0	1.50	12,670	199.8	31.26	7,823	376.2	22.13	140,038	87.2	87.84	1,007
Hawaii	345.2	3.66	10,598	—	—	—	345.2	21.53	148,458	—	—	—
Alaska & Hawaii	**268.9**	**3.02**	**11,214**	**199.8**	**31.26**	**7,823**	**346.2**	**21.55**	**148,179**	**87.2**	**87.84**	**1,007**

See page 35 for footnotes.

TABLE 30

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

BY STATE—YEAR 1987

Division/State	Average Cost per Million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
Total United States	**71.11¢**	**7.68**	**10,803**
Maine	58.01	6.42	11,059
New Hampshire	—	—	—
Vermont	69.66	7.44	10,678
Massachusetts	82.06	9.94	12,115
Rhode Island	—	—	—
Connecticut	93.27	9.80	10,502
New England	**84.90**	**9.05**	**10,663**
New York	61.73	6.71	10,872
New Jersey	78.85	8.48	10,753
Pennsylvania	66.61	7.39	11,088
Middle Atlantic	**68.67**	**7.51**	**10,931**
Ohio	82.31	8.45	10,271
Indiana	—	—	—
Illinois	71.81	7.89	10,986
Michigan	75.86	8.55	11,272
Wisconsin	49.33	5.21	10,572
East North Central	**70.15**	**7.66**	**10,922**
Minnesota	50.59	5.46	10,802
Iowa	73.26	7.88	10,757
Missouri	60.85	6.55	10,759
North Dakota	—	—	—
South Dakota	—	—	—
Nebraska	64.76	6.87	10,615
Kansas	55.73	5.77	10,354
West North Central	**58.38**	**6.23**	**10,664**
Delaware	—	—	—
Maryland	52.24	5.59	10,701
District of Columbia	—	—	—
Virginia	55.17	6.00	10,877
West Virginia	—	—	—
North Carolina	61.17	6.53	10,674
South Carolina	63.58	6.70	10,533
Georgia	92.06	10.09	10,962
Florida	62.96	6.85	10,878
South Atlantic	**64.22**	**6.89**	**10,725**
Kentucky	—	—	—
Tennessee	N/A	N/A	N/A
Alabama	66.36	7.41	11,165
Mississippi	85.49	9.60	11,233
East South Central	**74.13**	**8.30**	**11,193**
Arkansas	73.51	7.97	10,837
Louisiana	97.61	10.42	10,678
Oklahoma	—	—	—
Texas	—	—	—
West South Central	**85.96**	**9.24**	**10,754**
Montana	—	—	—
Idaho	—	—	—
Wyoming	—	—	—
Colorado	N/A	N/A	N/A
New Mexico	—	—	—
Arizona	85.05	8.85	10,408
Utah	—	—	—
Nevada	—	—	—
Mountain	**85.05**	**8.85**	**10,408**
Washington	49.56	5.23	10,552
Oregon	43.88	4.84	11,037
California	99.61	10.68	10,725
Pacific	**86.66**	**9.30**	**10,735**
Alaska	—	—	—
Hawaii	—	—	—
Alaska & Hawaii	—	—	—

N/A Not Available.

TABLE 31

AVERAGE COST OF FOSSIL FUELS DELIVERED TO STEAM-ELECTRIC UTILITY PLANTS

BY YEARS

(CENTS PER MILLION BTU)

Year	Coal	Residual Oil*	Natural Gas**	All Fossil Fuels**
1987	150.6	297.6	223.4	170.7
1986	157.9	240.1	234.4	175.0
1985	164.8	424.4	343.1	209.6
1984	166.4	481.2	358.3	219.2
1983	165.6	457.8	347.4	220.6
1982	164.7	483.2	337.6	224.9

*Residual fuel oil prices include Fuel Oil No. 4, No. 5, No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (Fuel Oil No. 2, kerosene, and jet fuel) prices.

**Includes small quantities of coke oven gas, refinery gas and blast furnace gas.

Source: U.S. Department of Energy. Energy Information Administration. Monthly Energy Review.

ENERGY

SECTION V

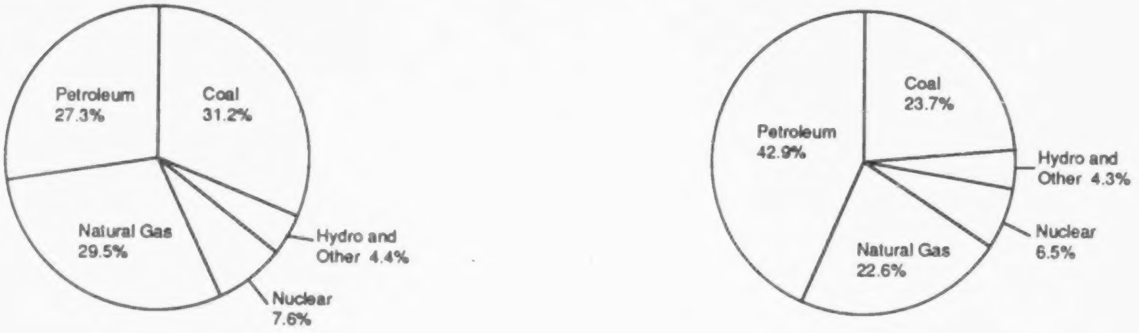
CHART V-A

ENERGY PRODUCTION AND CONSUMPTION

BY PRIMARY ENERGY SOURCE

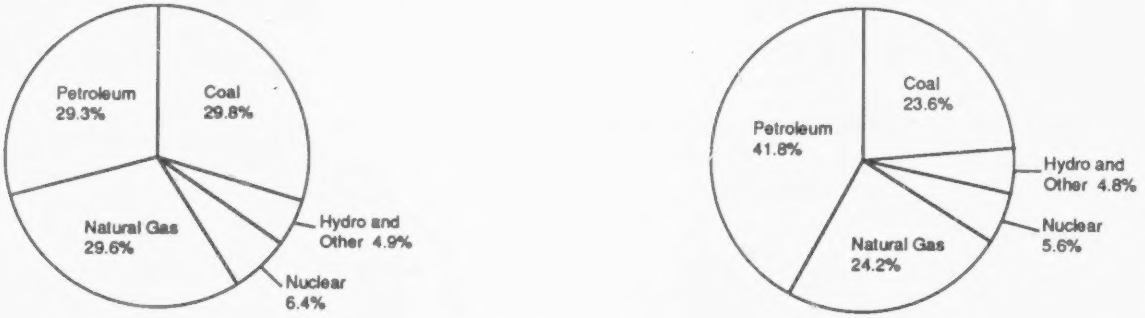
1987 Production
Total BTU's = 64.539 Quads

1987 Consumption
Total BTU's = 76.042 Quads



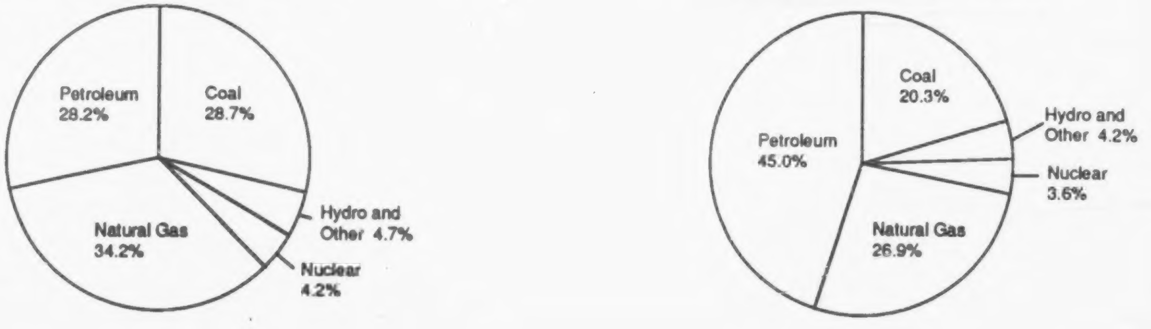
1985 Production
Total BTU's = 64.764 Quads

1985 Consumption
Total BTU's = 73.944 Quads



1980 Production
Total BTU's=64.761 Quads

1980 Consumption
Total BTU's = 75.955 Quads



Source: U.S. Department of Energy. Energy Information Administration. 'Monthly Energy Review' February, 1988.

TABLE 32

ENERGY SUPPLY AND DISPOSITION BALANCE BY YEARS

(QUADRILLION BTU)

	1987p	1986r	1985	1984	1983	1982	1981	1980	1979	1978	1977
SUPPLY											
Production											
Crude Oil & Lease Condensate	17.59	18.38	18.99	18.85	18.39	18.31	18.15	18.25	18.10	18.43	17.45
Natural Gas Plant Liquids	2.23	2.15	2.24	2.27	2.18	2.19	2.31	2.25	2.29	2.25	2.33
Natural Gas	16.84	16.47	16.91r	17.93	16.53	18.25	19.70	19.91	20.08	19.49	19.57
Coal	20.12	19.51	19.33	19.72	17.25	18.64	18.38	18.60	17.54	14.91	15.76
Nuclear	4.92	4.47	4.15	3.55	3.20	3.13	3.01	2.74	2.78	3.02	2.70
Hydro	2.61	3.03	2.94	3.31	3.50	3.26	2.76	2.90	2.93	2.94	2.33
Other	0.24	0.23	0.21	0.17	0.13	0.11	0.13	0.11	0.09	0.07	0.08
Total Production	**64.55**	**64.25**	**64.76r**	**65.81**	**61.19**	**63.89**	**64.42**	**64.76**	**63.80**	**61.10**	**60.22**
Imports											
Crude Oil	9.99	9.00	6.81	7.30	7.08	7.42	9.34	11.19	13.83	13.46	14.03
Refined Petroleum Products	3.89	4.20	3.80	4.13	3.57	3.36	3.30	3.46	4.11	4.36	4.73
Natural Gas	0.99	0.75	0.95	0.85	0.94	0.95	0.92	1.01	1.30	0.99	1.04
Other	0.55	0.48	0.54	0.48	0.44	0.36	0.42	0.31	0.38	0.44	0.30
Total Imports	**15.41**	**14.43**	**12.10**	**12.76**	**12.03**	**12.09**	**13.97**	**15.97**	**19.62**	**19.25**	**20.09**
Adjustments	(0.07)	(0.36)	1.31	(0.70)	1.00	(0.51)	(0.08)	(1.05)	(1.65)	(0.34)	(1.95)
Total Supply	**79.89**	**78.31**	**78.17r**	**77.86**	**74.22**	**75.47**	**78.32**	**79.68**	**81.77**	**80.02**	**78.36**
DISPOSITION											
Exports											
Coal	2.10	2.25	2.44	2.15	2.04	2.79	2.94	2.42	1.75	1.08	1.44
Other	1.79	1.81	1.80	1.65	1.68	1.84	1.38	1.30	1.11	0.86	0.63
Total Exports	**3.88**	**4.05**	**4.23**	**3.80**	**3.72**	**4.63**	**4.33**	**3.72**	**2.87**	**1.93**	**2.07**
Consumption											
Refined Petroleum Products	32.63	32.20	30.92	31.05	30.05	30.23	31.93	34.20	37.12	37.97	37.12
Natural Gas	17.18	16.71	17.83r	18.51	17.36	18.51	19.93	20.39	20.67	20.00	19.93
Coal	18.00	17.26	17.48	17.07	15.89r	15.32	15.91	15.42	15.04	13.77	13.92
Nuclear	4.92	4.47	4.15	3.55	3.20	3.13	3.01	2.74	2.78	3.02	2.70
Hydro	3.04	3.40	3.36	3.72	3.87	3.56	3.11	3.12	3.14	3.14	2.51
Other	0.25	0.21	0.20	0.16	0.12	0.09	0.11	0.08	0.15	0.19	0.10
Total Consumption	**76.01**	**74.26**	**73.94r**	**74.06**	**70.50**	**70.84**	**73.99**	**75.96**	**78.90**	**78.09**	**76.29**
Total Disposition	**79.89**	**78.31**	**78.17r**	**77.86**	**74.22**	**75.47**	**78.32**	**79.68**	**81.77**	**80.02**	**78.36**

	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
SUPPLY										
Production										
Crude Oil & Lease Condensate	17.26	17.73	18.57	19.49	20.04	20.03	20.40	19.56	19.31	18.65
Natural Gas Plant Liquids	2.33	2.37	2.47	2.57	2.60	2.54	2.51	2.42	2.32	2.18
Natural Gas	19.48	19.64	21.21	22.19	22.21	22.28	21.67	20.45	19.07	17.94
Coal	15.65	14.99	14.07	13.99	14.09	13.19	14.61	13.86	13.61	13.83
Nuclear	2.11	1.90	1.27	0.91	0.58	0.41	0.24	0.15	0.14	0.09
Hydro	2.98	3.15	3.18	2.86	2.86	2.82	2.63	2.65	2.35	2.35
Other	0.08	0.07	0.06	0.05	0.03	0.02	0.02	0.02	0.01	0.01
Total Production	**59.89**	**59.86**	**60.84**	**62.06**	**62.42**	**61.29**	**62.07**	**59.10**	**56.81**	**55.04**
Imports										
Crude Oil	11.24	8.72	7.40	6.89	4.71	3.57	2.81	2.99	2.76	2.40
Refined Petroleum Products	4.43	4.23	5.73	6.58	5.59	4.97	4.66	3.91	3.46	3.15
Natural Gas	0.99	0.98	0.99	1.06	1.05	0.96	0.85	0.75	0.67	0.58
Other	0.18	0.19	0.30	0.21	0.11	0.08	0.07	0.06	0.05	0.05
Total Imports	**16.84**	**14.11**	**14.41**	**14.73**	**11.46**	**9.58**	**8.39**	**7.71**	**6.93**	**6.19**
Adjustments	(0.18)	(1.07)	(0.48)	(0.46)	(0.48)	(0.82)	(1.37)	(0.47)	(0.71)	(1.52)
Total Supply	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**	**66.34**	**63.03**	**59.71**
DISPOSITION										
Exports										
Coal	1.60	1.76	1.62	1.43	1.53	1.55	1.94	1.53	1.38	1.35
Other	0.59	0.60	0.60	0.63	0.61	0.63	0.73	0.62	0.65	0.79
Total Exports	**2.19**	**2.36**	**2.22**	**2.05**	**2.14**	**2.18**	**2.66**	**2.15**	**2.03**	**2.15**
Consumption										
Refined Petroleum Products	35.17	32.73	33.45	34.84	32.95	30.56	29.52	28.34	26.98	25.28
Natural Gas	20.35	19.95	21.73	22.51	22.70	22.47	21.79	20.68	19.21	17.94
Coal	13.58	12.66	12.66	12.97	12.08	11.60	12.26	12.38	12.33	11.91
Nuclear	2.11	1.90	1.27	0.91	0.58	0.41	0.24	0.15	0.14	0.09
Hydro	3.07	3.22	3.31	3.01	2.94	2.86	2.65	2.66	2.34	2.34
Other	0.08	0.09	1.12	0.04	0.01	(0.02)	(0.04)	(0.02)	*	(0.01)
Total Consumption	**74.36**	**70.55**	**72.54**	**74.28**	**71.26**	**67.89**	**66.43**	**64.19**	**61.00**	**57.57**
Total Disposition	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**	**66.34**	**63.03**	**59.71**

Source: U.S. Department of Energy. Energy Information Administration. Annual Energy Review 1987.

** Less than .005 Quadrillion BTU.*

( ) Denotes negative figure. p Preliminary. r Revised.

Note: Total may not equal sum of components due to independent rounding.

TABLE 33

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES

BY KIND OF FUEL, BY SECTOR*
(QUADRILLION BTU)

	1987p	1986r	1985	1984	1983	1982
Coal						
Residential & Commercial	0.16	0.18	0.18	0.21	0.19r	0.19
Industrial	2.67	2.64	2.76	2.84	2.49	2.55
Transportation	**	**	**	**	**	**
Electric Utilities	15.19	14.44	14.54	14.02	13.21	12.58
Total	18.02	17.26	17.48	17.07	15.89r	15.32
Natural Gas (Dry)						
Residential & Commercial	6.85	6.83	7.08r	7.29	7.02	7.43
Industrial	6.87	6.69	7.08r	7.45	6.82	7.12
Transportation	0.51	0.50	0.52	0.55	0.51	0.61
Electric Utilities	2.94	2.69	3.16	3.22	3.00	3.34
Total	17.18	16.71	17.83r	18.51	17.36	18.51
Petroleum						
Residential & Commerical	2.60	2.58	2.57	2.59r	2.50	2.45
Industrial	8.29	7.93	7.70	7.89	7.42	7.80
Transportation	20.72	20.24	19.56	19.30	18.59	18.42
Electric Utilities	1.26	1.45	1.09	1.29	1.54	1.57
Total	32.87	32.20	30.92	31.05	30.05	30.23

Note: Total may not equal sum of components due to independent rounding.
**Sector data excludes electricity sales and energy losses attributed to electric generation.*
***Since 1976 the amount of coal consumed by the transportation sector has been negligible.*
Total consumption by fuels will not agree with Energy Supply and Disposition Balance (Table 32) due to data revisions.
p Preliminary. r Revised.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Energy Review.

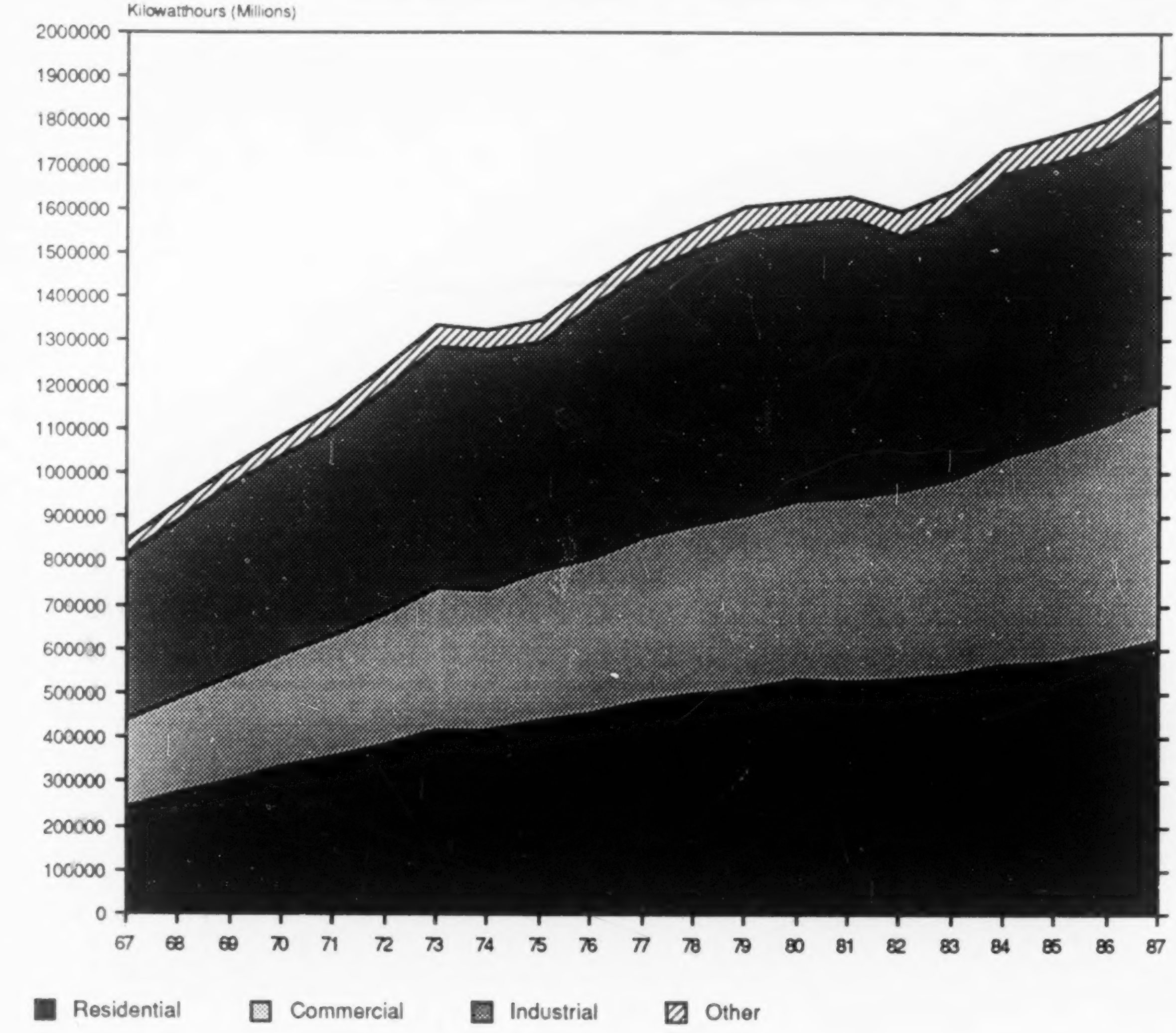
ENERGY SALES

SECTION VI

CHART VI-A

ENERGY SALES TO ULTIMATE CUSTOMERS

INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 39, page 44.

TABLE 38

ENERGY SALES—TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Exports to Canada and Mexico	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1987p	**2,437,073**	**5,881**	**2,431,192**	**845,069**	**656,708**	**842,680**	**14,542**	**62,819**	**4,878**	**4,495**
1986r	2,359,560	4,816	2,354,744	820,015	628,965	818,982	15,037	61,888	4,689	5,167
1985	2,310,847	4,965	2,305,882	792,875	605,865	820,301	14,644	62,165	4,704	5,328
1984	2,283,143	2,558	2,280,585	782,608	578,083	835,486	14,205	59,894	4,483	5,826
1983	2,163,124	3,337	2,159,787	750,293	545,601	782,984	13,944	57,267	4,300	5,398
1982	2,103,281	3,540	2,099,741	732,678	516,959	770,398	14,236	55,745	4,288	5,438
1981	2,152,506	1,832	2,150,674	730,479	521,698	819,641	14,683	53,737	4,206	6,230
1980	2,130,190	4,096	2,126,094	734,411	524,122	793,812	14,832	48,284	4,275	6,358
1979	2,086,582	2,182	2,084,400	695,996	494,723	817,617	14,792	49,604	4,256	7,412
1978	2,020,004	2,186	2,017,818	679,156	480,748	782,141	14,803	49,509	4,336	7,125
1977	1,953,535	2,744	1,950,791	652,345	469,227	757,168	14,418	46,242	4,212	7,179
1976	1,852,003	2,378	1,849,625	613,072	440,625	725,169	14,413	45,625	4,338	6,383
1975	1,738,107	5,083	1,733,024	586,149	418,069	661,558	13,907	43,625	4,273	5,443
1974	1,703,495	2,726	1,700,769	554,960	392,716	689,435	13,313	40,721	4,258	5,366
1973	1,705,773	2,570	1,703,203	554,171	396,903	687,235	12,836	42,340	4,186	5,532
1972	1,580,466	2,752	1,577,714	511,423	361,859	639,467	12,193	43,190	4,440	5,142
1971	1,469,955	3,514	1,466,441	479,080	333,752	592,700	11,673	39,819	4,537	4,880
1970	1,395,568	4,209	1,391,359	447,795	312,750	572,522	11,183	37,816	4,633	4,660
1969	1,311,008	3,830	1,307,178	407,922	286,686	557,220	10,772	35,861	4,531	4,186
1968	1,206,606	4,285	1,202,321	367,692	265,151	518,834	10,302	32,162	4,540	3,640
1967	1,111,373	4,350	1,107,023	331,525	242,492	486,043	9,863	29,426	4,572	3,102

Note: Total may not equal sum of components due to independent rounding.
**Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 39

ENERGY SALES—INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Sales for Resale†	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1987p	**1,986,234**	**106,675**	**1,879,559**	**618,495**	**544,616**	**658,417**	**10,397**	**43,196**	**2,239**	**2,200**
1986r	1,913,682	105,621	1,808,061	594,019	518,639	637,116	10,348	42,948	2,261	2,729
1985	1,871,702	102,773	1,768,929	573,253	498,320	638,513	10,339	43,565	2,252	2,687
1984	1,841,195	104,168	1,737,027	563,703	473,470	643,466	10,379	40,760	2,045	3,204
1983	1,749,915	109,540	1,640,375	546,080	445,300	597,405	10,445	36,396	1,929	2,820
1982	1,701,020	109,796	1,591,224	530,713	431,598	576,380	10,716	36,967	1,924	2,925
1981	1,745,234	116,248	1,628,986	527,119	420,014	628,481	10,918	37,623	1,939	2,892
1980	1,732,553	118,745	1,613,808	532,025	408,265	623,472	10,820	34,449	2,156	2,621
1979	1,719,640	117,408	1,602,232	509,655	394,511	648,031	10,854	34,165	2,103	2,913
1978	1,675,477	118,716	1,556,761	501,409	384,726	620,470	11,042	34,386	2,085	2,643
1977	1,619,820	115,409	1,504,411	481,167	375,903	598,042	10,912	33,208	2,450	2,729
1976	1,530,286	99,496	1,430,790	453,774	355,555	569,134	11,276	34,810	3,930	2,311
1975	1,447,147	101,273	1,345,874	439,496	340,082	515,798	10,868	33,528	4,158	1,944
1974	1,418,958	93,201	1,325,757	416,333	319,706	542,234	10,409	30,876	4,161	2,038
1973	1,417,386	82,990	1,334,396	416,851	323,018	545,912	10,034	32,452	4,086	2,043
1972	1,316,379	76,572	1,239,807	386,561	297,028	507,080	9,581	33,491	4,333	1,733
1971	1,215,614	70,009	1,145,605	358,564	272,703	468,512	9,206	30,618	4,424	1,578
1970	1,142,777	63,032	1,079,745	333,895	254,684	447,664	8,814	28,721	4,520	1,447
1969	1,070,721	58,641	1,012,080	304,497	232,965	433,422	8,441	26,928	4,417	1,410
1968	984,542	55,572	928,970	272,792	215,090	403,468	8,089	23,908	4,424	1,199
1967	890,755	45,334	845,421	244,416	194,772	371,319	7,695	21,726	4,445	1,048

Note: Total may not equal sum of components due to independent rounding.
† To non-investor-owned electric utilities and exports.
**Commercial and industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 40

ENERGY SALES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE

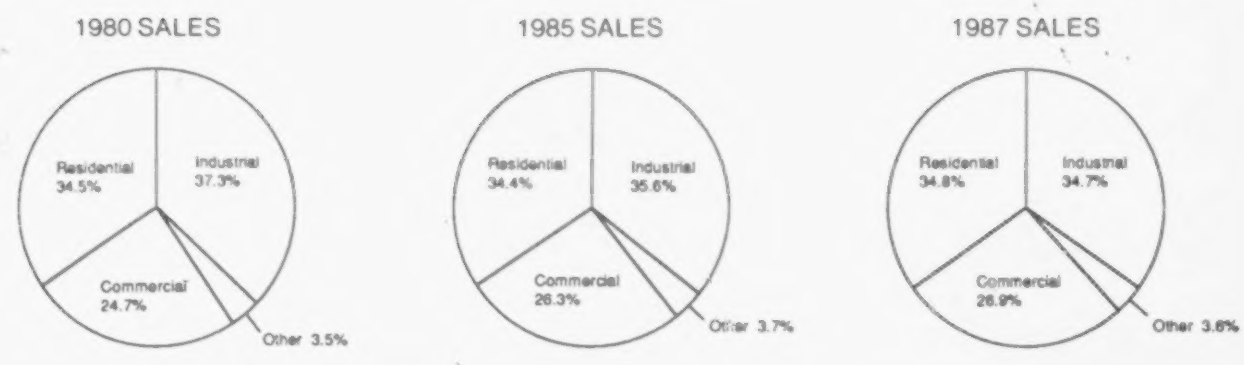
Year	Residential	Commercial	Industrial	Street & Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1987p	**34.8%**	**26.9%**	**34.7%**	**0.6%**	**2.6%**	**0.2%**	**0.2%**
1986r	34.8	26.7	34.8	0.6	2.7	0.2	0.2
1985	34.4	26.3	35.6	0.6	2.7	0.2	0.2
1984	34.3	25.4	36.6	0.6	2.6	0.2	0.3
1983	34.7	25.3	36.3	0.6	2.7	0.2	0.2
1982	34.9	24.6	36.7	0.7	2.7	0.2	0.2
1981	34.0	24.2	38.1	0.7	2.5	0.2	0.3
1980	34.5	24.7	37.3	0.7	2.3	0.2	0.3
1979	33.4	23.7	39.2	0.7	2.4	0.2	0.4
1978	33.7	23.8	38.8	0.7	2.4	0.2	0.4
1977	33.4	24.1	38.8	0.7	2.4	0.2	0.4
1976	33.2	23.8	39.2	0.8	2.5	0.2	0.3
1975	33.8	24.1	38.2	0.8	2.5	0.3	0.3
1974	32.6	23.1	40.5	0.8	2.4	0.3	0.3
1973	32.5	23.3	40.4	0.8	2.5	0.2	0.3
1972	32.4	23.0	40.5	0.8	2.7	0.3	0.3
1971	32.7	22.8	40.4	0.8	2.7	0.3	0.3
1970	32.2	22.5	41.2	0.8	2.7	0.3	0.3
1969	31.2	21.9	42.7	0.8	2.7	0.4	0.3
1968	30.6	22.1	43.1	0.8	2.7	0.4	0.3
1967	29.9	21.9	43.9	0.9	2.7	0.4	0.3

Based on sales data in Table 38. p Preliminary. r Revised.

CHART VI-B

ENERGY SALES

TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS



Total Sales = 2,126,094 kWh

Total Sales=2,305,882kWh

Total Sales=2,431,192kWh

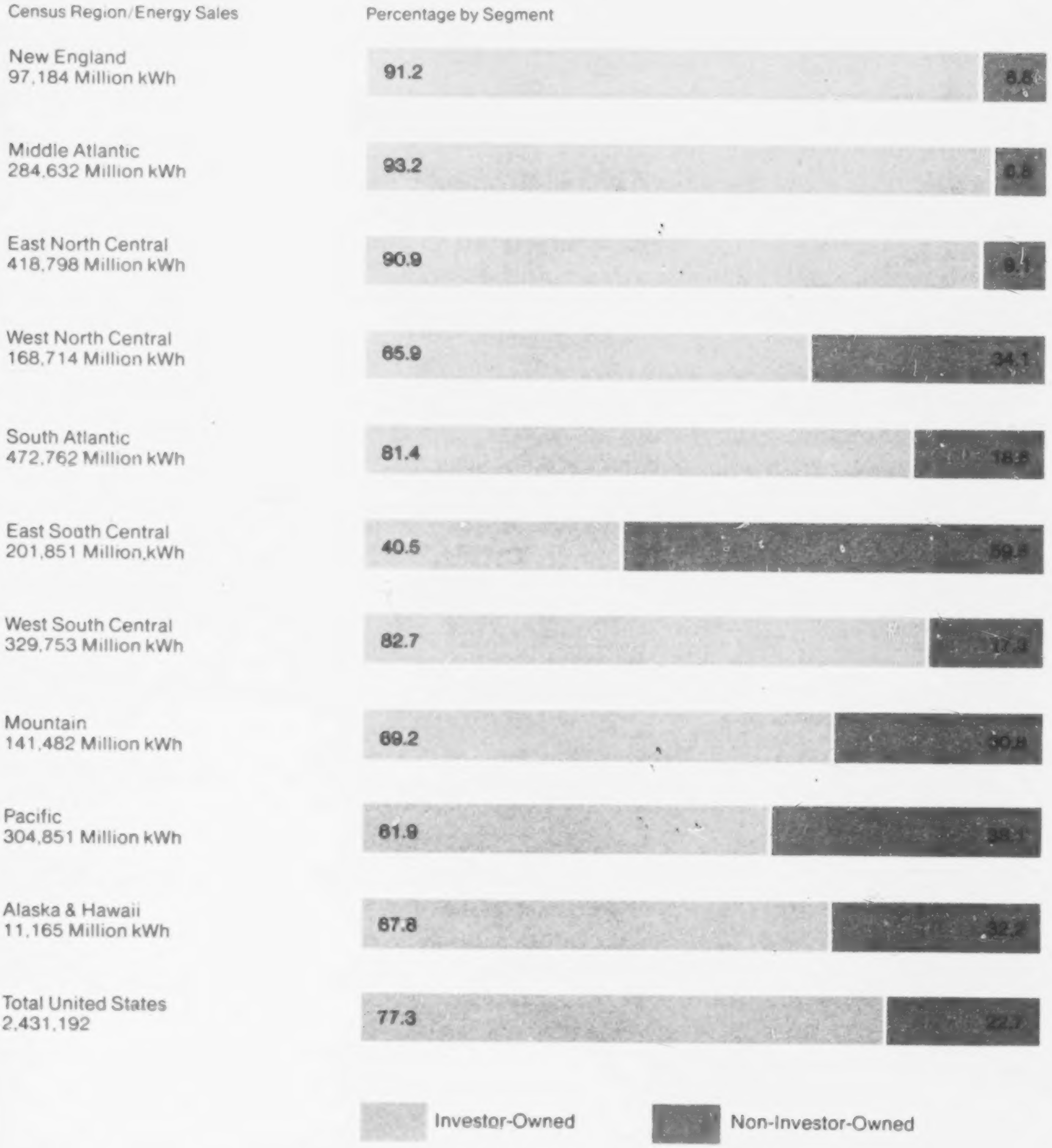
Based on Table 40, as shown above.

CHART VI-C

ENERGY SALES TO ULTIMATE CUSTOMERS

BY INVESTOR-OWNED AND NON-INVESTOR-OWNED ELECTRIC UTILITIES

1987p



p Preliminary.
Based on Table 41A, page 47 and Table 42A, page 49

TABLE 41A

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1987p—KILOWATTHOURS IN MILLIONS

Division/State	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,431,192**	**845,069**	**656,708**	**842,680**	**14,542**	**62,819**	**4,878**	**4,495**
Maine	10,718	3,726	2,476	4,351	61	102	—	2
New Hampshire	8,042	3,267	1,807	2,873	39	56	—	—
Vermont	4,630	1,940	1,387	1,260	20	23	—	*
Massachusetts	42,182	14,673	16,647	9,919	390	554	—	—
Rhode Island	5,934	2,186	2,167	1,403	74	104	—	—
Connecticut	25,679	9,671	9,442	6,212	196	27	123	10
New England	**97,184**	**35,461**	**33,925**	**26,017**	**780**	**867**	**123**	**12**
New York	118,824	35,352	43,696	28,753	1,098	7,313	2,581	31
New Jersey	58,712	19,297	23,243	15,710	434	—	6	24
Pennsylvania	107,095	35,726	25,955	43,974	536	115	719	68
Middle Atlantic	**284,632**	**90,375**	**92,894**	**88,437**	**2,068**	**7,428**	**3,306**	**123**
Ohio	130,262	36,760	27,396	61,880	658	3,503	46	18
Indiana	62,210	20,878	14,051	26,656	344	234	11	36
Illinois	104,633	31,873	27,901	37,503	730	6,219	406	1
Michigan	76,939	24,026	18,615	33,048	542	655	—	54
Wisconsin	44,753	15,194	11,652	17,142	406	267	—	92
East North Central	**418,798**	**128,731**	**99,615**	**176,229**	**2,681**	**10,878**	**464**	**200**
Minnesota	41,413	13,788	6,914	20,035	260	405	—	11
Iowa	26,867	10,005	5,760	10,384	190	528	—	1
Missouri	48,084	19,874	16,407	10,962	254	568	8	11
North Dakota	6,216	2,696	1,386	1,655	93	383	—	3
South Dakota	5,687	2,681	1,561	1,093	65	287	—	*
Nebraska	16,059	6,336	5,072	3,938	128	540	—	44
Kansas	24,387	8,608	8,427	6,983	170	198	—	1
West North Central	**168,714**	**63,989**	**45,527**	**55,050**	**1,160**	**2,910**	**8**	**71**
Delaware	6,966	2,297	1,920	2,691	32	21	—	3
Maryland	44,636	17,122	10,213	16,704	319	8	193	76
District of Columbia	9,007	1,410	4,580	2,708	94	—	215	—
Virginia	66,571	26,812	17,837	14,723	287	6,912	—	—
West Virginia	21,039	7,224	4,622	9,094	80	20	—	—
North Carolina	80,802	31,367	20,339	27,493	307	1,280	—	16
South Carolina	51,863	16,879	10,058	24,250	123	542	—	10
Georgia	71,407	27,071	18,648	24,883	371	299	135	—
Florida	120,471	59,143	40,147	17,409	554	3,023	78	117
South Atlantic	**472,762**	**189,326**	**128,365**	**139,956**	**2,166**	**12,104**	**622**	**223**
Kentucky	50,847	16,097	8,331	18,981	263	7,113	—	62
Tennessee	69,461	28,077	7,933	32,944	391	52	—	65
Alabama	54,303	19,057	9,675	25,188	326	22	—	36
Mississippi	27,240	11,133	6,316	9,246	181	361	—	3
East South Central	**201,851**	**74,364**	**32,254**	**86,358**	**1,161**	**7,548**	**—**	**166**
Arkansas	24,251	9,827	5,834	8,118	113	359	—	—
Louisiana	58,901	19,784	11,946	23,623	327	1,829	—	1,391
Oklahoma	35,006	13,822	9,520	9,695	169	1,800	—	—
Texas	211,595	72,095	54,778	77,832	927	5,813	—	151
West South Central	**329,753**	**115,529**	**82,078**	**119,268**	**1,536**	**9,801**	**—**	**1,541**
Montana	12,184	3,142	2,648	6,193	68	112	—	21
Idaho	16,064	5,175	4,507	6,312	64	5	—	—
Wyoming	10,641	1,661	2,171	6,680	31	75	—	23
Colorado	27,343	9,177	11,799	5,965	185	217	—	—
New Mexico	12,139	3,299	4,090	3,918	72	713	—	48
Arizona	36,557	13,806	12,100	8,794	288	1,176	27	366
Utah	13,881	4,001	4,356	4,829	51	642	—	2
Nevada	12,673	4,519	3,328	4,454	85	286	—	1
Mountain	**141,482**	**44,779**	**45,000**	**47,145**	**845**	**3,226**	**27**	**460**
Washington	75,922	25,417	16,344	32,478	255	1,374	20	34
Oregon	36,765	13,214	10,506	12,777	145	81	—	42
California	192,163	60,280	66,440	55,342	1,638	6,535	309	1,619
Pacific	**304,851**	**98,911**	**93,290**	**100,597**	**2,038**	**7,990**	**329**	**1,696**
Alaska	3,867	1,534	1,877	337	48	68	—	3
Hawaii	7,298	2,070	1,884	3,286	58	—	—	—
Alaska & Hawaii	**11,165**	**3,604**	**3,761**	**3,623**	**106**	**68**	**—**	**3**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
**Less than five hundred thousand kilowatthours.*

TABLE 41B

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1986r—KILOWATTHOURS IN MILLIONS

Division/State	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**2,354,744**	**820,015**	**628,965**	**818,982**	**15,037**	**61,888**	**4,689**	**5,167**
Maine	10,203	3,575	2,288	4,142	63	134	—	*
New Hampshire	7,540	3,080	1,624	2,741	41	55	—	—
Vermont	4,456	1,897	861	1,559	20	119	—	*
Massachusetts	40,023	13,867	15,558	9,683	394	521	—	—
Rhode Island	5,657	2,064	2,034	1,368	73	118	—	—
Connecticut	24,504	9,082	8,886	6,153	201	24	148	10
New England	**92,384**	**33,564**	**31,252**	**25,647**	**792**	**971**	**148**	**10**
New York	115,475	33,819	42,025	29,113	1,090	7,038	2,358	31
New Jersey	56,018	18,089	21,759	15,707	434	—	6	24
Pennsylvania	102,497	34,219	24,782	42,026	538	123	743	66
Middle Atlantic	**273,991**	**86,127**	**88,565**	**86,846**	**2,062**	**7,161**	**3,107**	**122**
Ohio	124,259	35,235	26,317	58,608	658	3,378	46	19
Indiana	60,019	20,402	11,964	27,018	356	229	12	38
Illinois	101,706	30,845	27,246	36,662	723	5,831	398	1
Michigan	74,251	22,929	17,768	32,241	544	713	—	56
Wisconsin	42,723	14,924	11,036	15,989	415	269	—	90
East North Central	**402,957**	**124,336**	**94,330**	**170,517**	**2,697**	**10,418**	**456**	**203**
Minnesota	39,220	13,648	6,642	18,265	262	392	—	12
Iowa	26,301	9,990	5,596	10,001	191	522	—	1
Missouri	46,976	19,501	15,486	11,144	276	550	9	11
North Dakota	6,457	2,855	1,455	1,673	93	378	—	3
South Dakota	5,655	2,745	1,511	1,050	65	283	—	*
Nebraska	15,911	6,232	4,929	4,028	128	530	—	64
Kansas	23,865	8,351	8,299	6,852	160	200	—	2
West North Central	**164,385**	**63,323**	**43,919**	**53,013**	**1,175**	**2,854**	**9**	**93**
Delaware	6,823	2,113	1,813	2,841	31	21	—	4
Maryland	41,705	15,722	9,625	15,777	311	8	187	76
District of Columbia	8,588	1,332	4,345	2,606	94	—	212	—
Virginia	63,168	25,240	16,624	14,354	284	6,656	10	—
West Virginia	20,586	6,973	4,490	9,020	72	31	—	1
North Carolina	76,351	29,535	19,290	25,978	304	1,229	—	15
South Carolina	49,404	16,130	9,591	23,019	125	528	—	11
Georgia	68,670	25,988	17,607	24,287	361	294	134	—
Florida	116,561	57,569	38,403	16,893	544	2,961	73	119
South Atlantic	**451,857**	**180,603**	**121,786**	**134,775**	**2,125**	**11,728**	**616**	**225**
Kentucky	49,819	15,427	7,928	18,238	262	7,904	—	60
Tennessee	68,244	27,304	7,176	33,235	390	52	—	87
Alabama	51,728	18,450	9,149	23,749	319	22	—	39
Mississippi	26,827	11,032	6,260	9,024	167	340	—	4
East South Central	**196,617**	**72,213**	**30,514**	**84,245**	**1,138**	**8,317**	**—**	**190**
Arkansas	23,155	9,436	5,650	7,600	112	358	—	—
Louisiana	59,517	20,464	12,105	23,149	326	1,792	—	1,682
Oklahoma	35,005	13,821	9,606	9,610	169	1,799	—	—
Texas	212,317	71,980	54,942	78,671	934	5,647	—	143
West South Central	**329,994**	**115,701**	**82,302**	**119,030**	**1,541**	**9,596**	**—**	**1,825**
Montana	12,065	3,297	2,618	5,932	74	112	—	32
Idaho	15,742	5,376	4,340	5,955	65	5	—	—
Wyoming	10,160	1,703	2,139	6,191	31	80	—	16
Colorado	26,630	8,851	11,559	5,835	184	202	—	*
New Mexico	11,857	3,146	3,951	3,933	70	703	—	54
Arizona	33,678	12,508	11,123	8,697	294	676	26	353
Utah	13,485	3,990	4,233	4,573	53	634	—	2
Nevada	11,602	4,092	3,085	3,056	84	284	—	*
Mountain	**135,217**	**42,964**	**43,048**	**45,172**	**855**	**2,696**	**26**	**457**
Washington	75,831	26,898	16,304	31,000	254	1,333	19	24
Oregon	35,216	13,182	10,147	11,642	147	82	—	16
California	185,293	57,542	63,134	53,504	2,145	6,658	310	2,001
Pacific	**296,339**	**97,622**	**89,585**	**96,146**	**2,545**	**8,072**	**329**	**2,041**
Alaska	3,970	1,603	1,891	350	50	74	—	2
Hawaii	7,032	1,960	1,773	3,242	57	—	—	—
Alaska & Hawaii	**11,003**	**3,563**	**3,665**	**3,591**	**107**	**74**	**—**	**2**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred thousand kilowatthours.*

TABLE 42A

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1987p—KILOWATTHOURS IN MILLIONS

Division/State	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**1,879,559**	**618,495**	**544,616**	**658,417**	**10,397**	**43,196**	**2,239**	**2,200**
Maine	10,433	3,585	2,429	4,261	59	100	—	—
New Hampshire	7,400	2,876	1,620	2,812	36	56	—	—
Vermont	3,781	1,540	1,281	939	14	7	—	—
Massachusetts	36,886	12,695	15,558	7,971	339	323	—	—
Rhode Island	5,906	2,169	2,162	1,396	74	104	—	—
Connecticut	24,239	9,290	9,122	5,518	186	—	123	—
New England	**88,645**	**32,154**	**32,173**	**22,898**	**707**	**589**	**123**	**—**
New York	102,869	33,997	43,191	22,300	585	2,697	68	31
New Jersey	57,927	18,931	23,112	15,425	431	—	6	24
Pennsylvania	104,503	34,024	25,460	43,606	526	99	719	68
Middle Atlantic	**265,298**	**86,952**	**91,762**	**81,331**	**1,542**	**2,796**	**793**	**123**
Ohio	121,277	32,184	25,739	59,289	632	3,371	46	16
Indiana	52,897	15,603	12,783	24,031	272	161	11	36
Illinois	98,125	28,332	26,177	36,482	705	6,022	406	1
Michigan	69,904	21,538	16,420	30,875	415	602	—	54
Wisconsin	38,324	12,251	10,517	14,934	356	229	—	37
East North Central	**380,527**	**109,909**	**91,636**	**165,610**	**2,380**	**10,385**	**464**	**144**
Minnesota	29,989	7,245	4,509	17,781	155	289	—	11
Iowa	20,780	6,477	4,967	8,819	172	344	—	1
Missouri	36,321	13,229	13,726	8,853	211	299	—	2
North Dakota	3,455	1,439	765	1,084	48	116	—	3
South Dakota	3,073	1,132	1,059	821	30	31	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	17,606	6,036	6,087	5,318	144	21	—	1
West North Central	**111,223**	**35,557**	**31,113**	**42,676**	**759**	**1,100**	**—**	**17**
Delaware	5,679	1,691	1,685	2,272	28	—	—	3
Maryland	42,435	15,779	9,683	16,479	225	—	193	76
District of Columbia	9,007	1,410	4,580	2,708	94	—	215	—
Virginia	59,333	22,865	16,489	12,994	247	6,738	—	—
West Virginia	20,953	7,172	4,602	9,082	78	20	—	—
North Carolina	63,784	21,672	16,406	24,456	227	1,017	—	6
South Carolina	36,403	10,367	7,810	17,678	91	446	—	10
Georgia	51,216	14,720	14,556	21,461	265	80	135	—
Florida	96,124	46,612	34,362	11,814	379	2,762	78	117
South Atlantic	**384,937**	**142,288**	**110,173**	**118,944**	**1,633**	**11,063**	**622**	**213**
Kentucky	31,270	9,001	6,266	8,763	139	7,101	—	1
Tennessee	1,425	538	262	591	4	29	—	—
Alabama	34,755	11,149	7,477	15,969	156	—	—	4
Mississippi	14,374	5,024	3,996	4,945	99	311	—	—
East South Central	**81,824**	**25,711**	**18,000**	**30,268**	**399**	**7,441**	**—**	**4**
Arkansas	17,238	6,009	4,351	6,472	87	320	—	—
Louisiana	51,811	15,310	10,688	22,342	290	1,789	—	1,391
Oklahoma	27,312	9,581	7,607	8,309	136	1,679	—	—
Texas	176,413	55,309	45,659	70,717	781	3,946	—	1
West South Central	**272,773**	**86,209**	**68,305**	**107,840**	**1,295**	**7,733**	**—**	**1,391**
Montana	7,449	2,102	2,060	3,146	57	67	—	17
Idaho	14,235	4,342	3,936	5,930	25	2	—	—
Wyoming	7,908	1,000	1,120	5,736	20	8	—	23
Colorado	18,062	5,458	8,894	3,480	138	92	—	—
New Mexico	8,879	2,444	2,926	2,860	61	555	—	33
Arizona	19,443	7,296	6,805	5,033	95	164	—	51
Utah	10,787	3,009	2,958	4,225	44	550	—	*
Nevada	11,143	4,281	3,071	3,425	84	282	—	—
Mountain	**97,905**	**29,932**	**31,770**	**33,835**	**524**	**1,720**	**—**	**125**
Washington	22,367	10,685	7,308	4,281	85	*	—	7
Oregon	25,587	9,943	8,253	7,217	129	5	—	38
California	140,897	46,952	52,183	40,146	884	358	239	136
Pacific	**188,851**	**67,580**	**67,745**	**51,644**	**1,098**	**364**	**239**	**181**
Alaska	277	132	54	85	1	5	—	—
Hawaii	7,298	2,070	1,884	3,286	58	—	—	—
Alaska & Hawaii	**7,575**	**2,202**	**1,938**	**3,371**	**59**	**5**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
** Less than five hundred thousand kilowatthours.*

TABLE 42B

ENERGY SALES

INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE

YEAR 1986r—KILOWATTHOURS IN MILLIONS

Division/State	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**1,808,061**	**594,019**	**518,639**	**637,116**	**10,348**	**42,948**	**2,261**	**2,729**
Maine	9,936	3,438	2,245	4,0[illegible]	59	131	—	—
New Hampshire	6,960	2,723	1,454	2,69[illegible]	38	54	—	—
Vermont	3,650	1,511	753	1,26[illegible]	14	109	—	—
Massachusetts	34,974	11,970	14,519	7,838	339	308	—	—
Rhode Island	5,631	2,048	2,031	1,362	73	118	—	—
Connecticut	23,124	8,719	8,593	5,471	192	—	148	—
New England	**84,274**	**30,408**	**29,596**	**22,687**	**715**	**720**	**148**	**—**
New York	99,125	32 471	41,521	21,849	574	2,625	53	31
New Jersey	55,246	17,731	21,625	15,429	431	—	6	24
Pennsylvania	99,948	32,544	24,306	41,654	528	107	743	66
Middle Atlantic	**254,319**	**82,746**	**87,453**	**78,932**	**1,533**	**2,731**	**802**	**122**
Ohio	115,425	30,745	24,690	56,054	631	3,241	46	17
Indiana	50,735	15,092	10,691	24,464	283	156	12	38
Illinois	95,130	27,229	25,539	35,628	698	5,636	398	1
Michigan	67,379	20,522	15,612	30,113	417	660	—	56
Wisconsin	36,309	11,973	9,907	13,797	365	231	—	36
East North Central	**364,978**	**105,561**	**86,438**	**160,057**	**2,394**	**9,926**	**456**	**147**
Minnesota	27,859	7,049	4,310	16,055	158	275	—	12
Iowa	20,089	6,335	4,816	8,428	172	337	—	1
Missouri	35,142	12,699	13,172	8,760	218	291	—	1
North Dakota	3,541	1,514	832	1,029	48	115	—	3
South Dakota	2,998	1,128	1,028	782	30	30	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	16,954	5,790	5,870	5,136	133	23	—	2
West North Central	**106,583**	**34,514**	**30,029**	**40,190**	**760**	**1,070**	**—**	**19**
Delaware	5,574	1,538	1,585	2,420	27	—	—	4
Maryland	39,679	14,507	9,128	15,562	220	—	187	76
District of Columbia	8,588	1,332	4,345	2,606	94	—	212	—
Virginia	56,365	21,589	15,313	12,720	245	6,488	10	—
West Virginia	20,502	6,923	4,470	9,008	70	31	—	1
North Carolina	59,985	20,316	15,472	22,996	224	971	—	6
South Carolina	34,638	9,950	7,451	16,690	94	442	—	11
Georgia	49,277	14,256	13,669	20,878	262	78	134	—
Florida	91,850	44,670	32,328	11,590	376	2,695	73	119
South Atlantic	**366,460**	**135,080**	**103,761**	**114,468**	**1,614**	**10,705**	**616**	**216**
Kentucky	30,779	8,550	5,938	8,264	138	7,888	—	1
Tennessee	1,366	515	251	566	4	28	—	—
Alabama	32,801	10,607	7,016	15,026	150	—	—	4
Mississippi	14,275	5,011	3,958	4,887	100	319	—	—
East South Central	**79,221**	**24,683**	**17,163**	**28,743**	**393**	**8,235**	**—**	**4**
Arkansas	16,365	5,774	4,197	5,993	85	316	—	—
Louisiana	51,963	15,642	10,735	21,864	289	1,751	—	1,682
Oklahoma	27,030	9,505	7,547	8,163	137	1,678	—	—
Texas	174,551	53,792	44,969	71,215	781	3,793	—	1
West South Central	**269,908**	**84,713**	**67,447**	**107,235**	**1,292**	**7,538**	**—**	**1,683**
Montana	7,295	2,225	2,012	2,913	63	69	—	13
Idaho	13,862	4,530	3,780	5,525	25	2	—	—
Wyoming	7,379	1,032	1,129	5,175	20	7	—	16
Colorado	17,537	5,264	8,718	3,323	138	96	—	—
New Mexico	8,570	2,319	2,747	2,880	59	526	—	39
Arizona	18,331	6,640	6,420	4,956	90	156	—	69
Utah	10,437	3,005	2,832	4,011	47	542	—	*
Nevada	10,178	3,861	2,827	3,127	83	279	—	—
Mountain	**93,589**	**28,876**	**30,463**	**31,910**	**525**	**1,677**	**—**	**138**
Washington	21,835	10,771	6,923	4,055	85	*	—	—
Oregon	24,927	9,927	7,939	6,911	131	6	—	13
California	134,641	44,648	49,586	38,596	849	336	240	387
Pacific	**181,404**	**65,347**	**64,449**	**49,562**	**1,066**	**341**	**240**	**399**
Alaska	294	131	67	90	1	5	—	—
Hawaii	7,032	1,960	1,773	3,242	57	—	—	—
Alaska & Hawaii	**7,327**	**2,091**	**1,840**	**3,332**	**59**	**5**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.

r Revised.

** Less than five hundred thousand kilowatthours.*

TABLE 43

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1982–1987 — KILOWATTHOURS IN MILLIONS

Year – Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR – 1987p								
First Quarter	595,052	221,668	153,944	198,107	3,776	15,122	1,313	1,122
Second Quarter	576,190	186,480	158,510	209,910	3,500	15,416	1,151	1,224
Third Quarter	673,131	243,315	185,945	221,287	3,468	16,826	1,180	1,111
Fourth Quarter	586,819	193,606	158,309	213,377	3,798	15,456	1,235	1,038
Total	**2,431,192**	**845,069**	**656,708**	**842,680**	**14,542**	**62,819**	**4,878**	**4,495**
YEAR – 1986r								
First Quarter	589,664	219,324	149,107	199,433	3,887	15,378	1,255	1,280
Second Quarter	550,583	175,028	150,349	204,504	3,468	14,940	1,101	1,193
Third Quarter	638,346	229,897	175,803	210,250	3,639	16,228	1,129	1,399
Fourth Quarter	576,151	195,766	153,706	204,795	4,043	15,341	1,205	1,294
Total	**2,354,744**	**820,015**	**628,965**	**818,982**	**15,037**	**61,888**	**4,689**	**5,167**
YEAR – 1985								
First Quarter	586,992	219,633	144,927	200,734	3,835	15,249	1,261	1,354
Second Quarter	542,301	169,611	144,271	206,463	3,531	15,946	1,113	1,368
Third Quarter	617,375	216,280	168,097	211,362	3,411	15,739	1,127	1,358
Fourth Quarter	559,214	187,351	148,570	201,742	3,868	15,232	1,202	1,249
Total	**2,305,882**	**792,875**	**605,865**	**820,301**	**14,644**	**62,165**	**4,704**	**5,328**
YEAR – 1984								
First Quarter	583,026	217,917	140,257	203,628	3,727	14,960	1,215	1,321
Second Quarter	539,133	170,463	136,287	211,638	3,482	14,703	1,062	1,498
Third Quarter	611,181	213,027	161,409	215,244	3,360	15,465	1,083	1,594
Fourth Quarter	547,244	181,201	140,130	204,976	3,635	14,765	1,124	1,413
Total	**2,280,585**	**782,608**	**578,083**	**835,486**	**14,205**	**59,894**	**4,483**	**5,826**
YEAR – 1983								
First Quarter	525,257	193,693	128,741	182,262	3,706	14,282	1,145	1,427
Second Quarter	494,569	159,651	126,364	190,063	3,186	13,050	991	1,262
Third Quarter	606,460	221,371	157,015	208,157	3,349	14,044	1,052	1,471
Fourth Quarter	533,502	175,578	133,481	202,503	3,702	15,890	1,112	1,237
Total	**2,159,787**	**750,293**	**545,601**	**782,984**	**13,944**	**57,267**	**4,300**	**5,398**
YEAR – 1982								
First Quarter	545,490	200,830	128,103	196,143	3,848	14,074	1,089	1,402
Second Quarter	495,898	161,985	122,258	192,608	3,247	13,575	1,018	1,207
Third Quarter	553,878	197,261	141,352	195,161	3,383	14,068	1,174	1,479
Fourth Quarter	504,474	172,601	125,245	186,486	3,757	14,027	1,006	1,350
Total	**2,099,741**	**732,678**	**516,959**	**770,398**	**14,236**	**55,745**	**4,288**	**5,438**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. *r Revised.*

TABLE 44

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY QUARTER AND CLASS OF SERVICE
1982-1987 – KILOWATTHOURS IN MILLIONS

Year – Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR – 1987p								
First Quarter	458,493	161,531	127,538	155,143	2,757	10,346	582	595
Second Quarter	446,568	136,661	131,473	164,351	2,400	10,523	539	621
Third Quarter	520,149	177,743	154,383	172,644	2,464	11,832	555	528
Fourth Quarter	454,350	142,560	131,221	166,279	2,776	10,495	563	456
Total	**1,879,559**	**618,495**	**544,616**	**658,417**	**10,397**	**43,196**	**2,239**	**2,200**
YEAR – 1986r								
First Quarter	451,114	158,240	122,675	155,507	2,768	10,634	592	699
Second Quarter	424,612	127,239	124,271	159,089	2,356	10,490	544	624
Third Quarter	488,815	165,646	145,051	162,995	2,494	11,330	551	749
Fourth Quarter	443,519	142,894	126,642	159,526	2,729	10,495	575	657
Total	**1,808,061**	**594,019**	**518,639**	**637,116**	**10,348**	**42,948**	**2,261**	**2,729**
YEAR – 1985								
First Quarter	446,638	157,530	119,021	155,471	2,766	10,547	594	710
Second Quarter	417,274	123,040	118,800	160,551	2,357	11,314	533	680
Third Quarter	474,423	156,403	138,465	164,672	2,485	11,140	548	710
Fourth Quarter	430,594	136,279	122,035	157,819	2,731	10,564	578	588
Total	**1,768,929**	**573,253**	**498,320**	**638,513**	**10,339**	**43,565**	**2,252**	**2,687**
YEAR – 1984								
First Quarter	440,739	155,856	114,878	155,737	2,762	10,221	542	744
Second Quarter	411,234	123,517	111,747	162,385	2,361	9,935	485	803
Third Quarter	466,477	153,472	132,327	166,206	2,506	10,596	499	873
Fourth Quarter	418,576	130,859	114,518	159,138	2,749	10,009	518	784
Total	**1,737,027**	**563,703**	**473,470**	**643,466**	**10,379**	**40,760**	**2,045**	**3,204**
YEAR – 1983								
First Quarter	396,596	140,291	104,692	138,549	2,820	9,042	500	702
Second Quarter	378,570	116,701	103,168	146,675	2,369	8,511	434	711
Third Quarter	459,118	160,843	128,304	157,168	2,498	9,029	490	786
Fourth Quarter	406,092	128,246	109,136	155,014	2,757	9,814	505	621
Total	**1,640,375**	**546,080**	**445,300**	**597,405**	**10,445**	**36,396**	**1,929**	**2,820**
YEAR – 1982								
First Quarter	384,791	136,343	101,471	133,673	2,893	9,184	499	728
Second Quarter	367,168	113,417	99,993	141,513	2,430	8,645	433	737
Third Quarter	445,348	156,317	124,356	151,637	2,563	9,171	489	815
Fourth Quarter	393,918	124,637	105,778	149,558	2,829	9,968	504	644
Total	**1,591,224**	**530,713**	**431,598**	**576,380**	**10,716**	**36,967**	**1,924**	**2,925**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. *r Revised.*

TABLE 45

AVERAGE ANNUAL KWH USE PER CUSTOMER

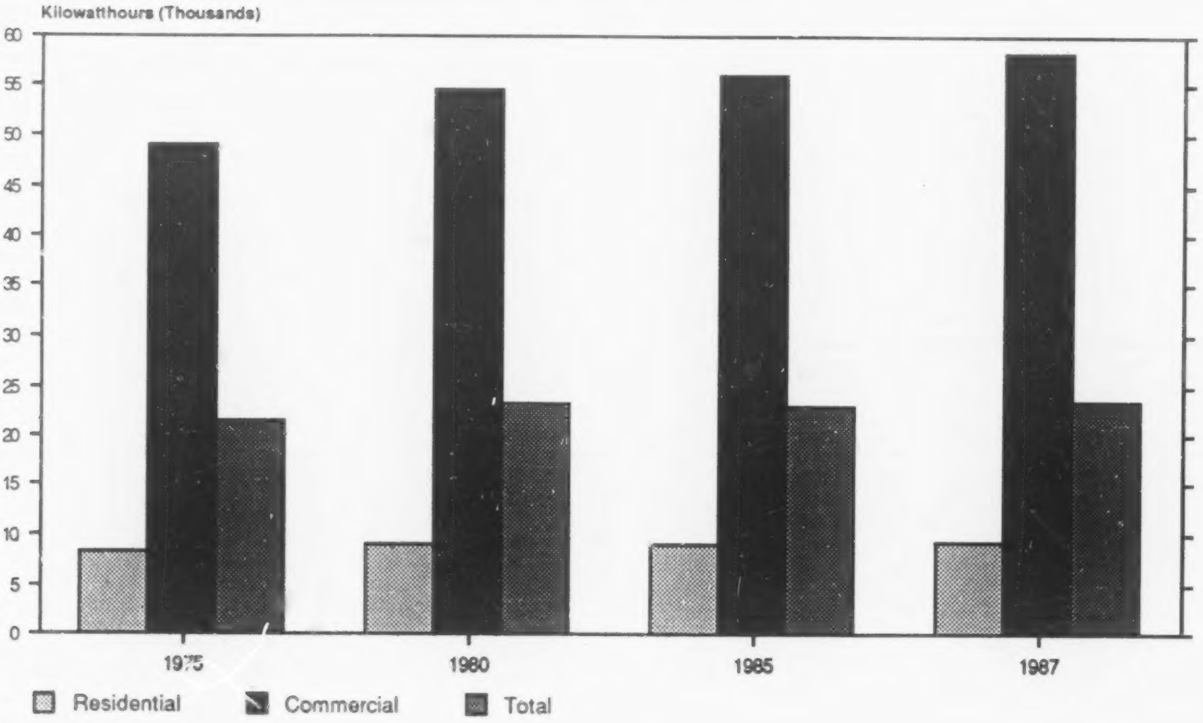
TOTAL ELECTRIC UTILITY INDUSTRY				INVESTOR-OWNED ELECTRIC UTILITIES			
Year	Residential	Commercial	Total Ultimate Customers	Year	Residential	Commercial	Total Ultimate Customers
1987p	**9,229**	**58,401**	**23,453**	**1987p**	**8,816**	**62,802**	**23,652**
1986r	9,090	57,161	23,071	1986r	8,627	61,462	23,201
1985	8,906	56,109	22,903	1985	8,487	60,517	23,149
1984	8,978	55,205	23,152	1984	8,500	59,270	23,173
1983	8,814	53,822	22,479	1983	8,379	57,003	22,293
1982	8,743	52,260	22,107	1982	8,261	56,379	21,940
1981	8,825	53,402	23,026	1981	8,311	55,742	22,753
1980	9,025	54,538	23,167	1980	8,539	55,210	22,949
1979	8,843	53,197	23,481	1979	8,360	54,594	23,287
1978	8,849	53,085	23,315	1978	8,430	54,653	23,197
1977	8,693	52,892	23,052	1977	8,279	54,520	22,938
1976	8,360	50,733	22,361	1976	7,969	52,560	22,263
1975	8,176	48,964	21,417	1975	7,855	50,966	21,305
1974	7,907	46,557	21,448	1974	7,574	48,426	21,343
1973	8,079	47,580	21,955	1973	7,769	49,550	21,989
1972	7,691	44,496	20,964	1972	7,413	46,565	21,002
1971	7,380	41,943	19,956	1971	7,062	43,596	19,917
1970	7,066	39,952	19,380	1970	6,720	41,272	19,167
1969	6,571	36,950	18,563	1969	6,253	38,025	18,305
1968	6,057	34,637	17,445	1968	5,727	35,549	17,159
1967	5,577	32,041	16,384	1967	5,241	32,492	15,930

Based on sales data in Tables 38 and 39, and average number of customers per year. *p Preliminary.* *r Revised.*

CHART VI-D

AVERAGE KILOWATTHOURS USED

TOTAL ELECTRIC UTILITY INDUSTRY



Based on Table 45, as shown above.

CUSTOMERS

SECTION VII

TABLE 47

ULTIMATE CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1987p	**104,525,026**	**92,318,697**	**11,358,420**	**494,545**	**166,489**	**184,841**	**27**	**2,007**
1986r	102,952,793	90,994,586	11,114,300	498,254	161,377	182,257	28	1,991
1985	101,579,271	89,819,726	10,920,861	499,728	158,307	178,759	28	1,862
1984	99,371,026	87,938,995	10,565,239	525,692	139,703	199,393	29	1,975
1983	96,985,531	85,842,195	10,266,449	500,215	153,659	219,879	31	3,103
1982	95,250,268	84,371,779	9,976,274	533,635	148,678	216,975	31	2,896
1981	94,011,299	83,304,355	9,847,260	516,996	141,051	197,187	31	4,419
1980	92,653,471	82,153,162	9,698,809	484,652	142,724	168,120	30	5,974
1979	89,771,985	79,620,180	9,386,572	477,874	124,228	158,098	30	5,003
1978	87,667,954	77,775,667	9,148,399	464,637	121,899	152,439	30	4,883
1977	85,590,212	75,923,145	8,943,732	448,009	120,594	149,934	28	4,770
1976	83,613,161	74,161,846	8,750,949	427,403	119,130	148,867	28	4,938
1975	81,344,890	72,570,187	8,591,108	414,665	116,555	147,387	29	4,959
1974	80,102,390	70,949,607	8,472,817	422,736	112,477	139,480	29	5,244
1973	78,461,251	69,438,429	8,361,847	413,383	108,787	133,619	46	5,140
1972	76,150,204	67,314,000	8,200,033	369,952	103,874	157,461	50	4,834
1971	74,265,071	65,650,046	8,002,572	355,967	96,252	155,414	48	4,772
1970	72,484,978	64,017,662	7,865,073	352,993	92,052	152,706	47	4,445
1969	70,929,138	62,598,910	7,744,851	348,648	86,678	145,071	49	4,931
1968	69,716,013	61,439,030	7,706,779	333,650	86,023	146,257	64	4,210
1967	68,167,525	60,033,404	7,579,626	324,222	82,445	143,870	65	3,893

**Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*

p Preliminary. r Revised.

TABLE 48

ULTIMATE CUSTOMERS
INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1987p	**80,234,039**	**70,826,677**	**8,768,187**	**360,469**	**128,855**	**149,404**	**21**	**426**
1986r	78,717,500	69,548,070	8,535,188	364,294	123,525	145,957	22	444
1985	77,203,821	68,234,704	8,340,862	363,757	121,395	142,621	22	460
1984	75,709,055	66,987,481	8,066,025	396,304	117,874	140,907	23	441
1983	74,247,765	65,718,130	7,886,857	387,875	115,170	139,2[illegible]	23	477
1982	72,979,298	64,648,932	7,702,142	378,016	113,251	136,484	23	450
1981	72,037,264	63,820,699	7,579,344	389,646	112,061	135,049	23	442
1980	70,996,563	62,902,588	7,459,959	375,540	123,589	134,595	23	269
1979	69,581,540	61,676,402	7,290,125	372,407	108,149	134,171	23	263
1978	67,922,975	60,216,110	7,106,705	364,123	106,286	129,496	23	232
1977	66,294,706	58,770,646	6,942,201	349,563	105,442	126,611	21	222
1976	64,896,400	57,530,599	6,805,345	329,522	103,754	126,674	22	484
1975	63,650,468	56,409,122	6,690,374	322,429	101,937	126,100	23	483
1974	62,667,061	55,499,145	6,624,061	326,409	97,438	119,531	23	454
1973	61,435,986	54,370,297	6,531,953	324,236	94,682	114,315	24	479
1972	59,804,431	52,868,920	6,422,032	284,733	90,206	138,052	25	463
1971	58,204,164	51,415,155	6,294,907	274,329	86,714	132,573	25	461
1970	56,888,819	50,210,348	6,194,383	270,132	83,443	130,036	24	453
1969	55,714,225	49,134,168	6,111,945	265,331	78,903	123,399	25	454
1968	54,680,477	48,140,270	6,078,790	258,848	78,950	123,136	40	443
1967	53,560,415	47,115,644	5,994,228	255,375	75,419	119,263	41	445

** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary r Revised

TABLE 49

CUSTOMERS IN PERCENT OF TOTAL
TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways*	Inter-departmental*
1987p	**88.3%**	**10.8%**	**0.5%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**
1986r	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1985	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1984	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1983	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1982	88.6	10.5	0.6	0.1	0.2	0.0	0.0
1981	88.6	10.5	0.5	0.2	0.2	0.0	0.0
1980	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1979	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1978	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1977	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1976	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1975	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1974	88.6	10.6	0.5	0.1	0.2	0.0	0.0
1973	88.5	10.7	0.5	0.1	0.2	0.0	0.0
1972	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1971	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1970	88.3	10.9	0.5	0.1	0.2	0.0	0.0
1969	88.3	10.9	0.5	0.1	0.2	0.0	0.0
1968	88.1	11.1	0.5	0.1	0.2	0.0	0.0
1967	88.1	11.1	0.5	0.1	0.2	0.0	0.0

** Less than one-tenth of one percent. p Preliminary. r Revised.*
Based on customer data in Table 47.

TABLE 50A

ULTIMATE CUSTOMERS
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1987p

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**104,525,026**	**92,318,697**	**11,358,420**	**494,545**	**166,489**	**184,841**	**27**	**2,007**
Maine	605,849	540,001	62,365	2,307	1,067	106	—	3
New Hampshire	527,671	460,117	64,114	1,511	1,485	444	—	—
Vermont	277,235	242,879	32,521	1,008	303	518	—	6
Massachusetts	2,495,246	2,216,577	258,142	13,043	4,841	2,643	—	—
Rhode Island	415,880	371,211	41,125	2,689	826	29	—	—
Connecticut	1,390,636	1,265,227	116,724	4,785	3,863	30	1	6
New England	**5,712,517**	**5,096,012**	**574,991**	**25,343**	**12,385**	**3,770**	**1**	**15**
New York	6,918,045	6,104,804	777,593	10,185	9,665	15,791	5	2
New Jersey	3,186,669	2,804,295	362,427	12,471	7,474	—	1	1
Pennsylvania	5,034,431	4,497,682	499,403	29,372	7,208	761	4	1
Middle Atlantic	**15,139,145**	**13,406,781**	**1,639,423**	**52,028**	**24,347**	**16,552**	**10**	**4**
Ohio	4,553,027	4,087,034	420,804	28,849	6,264	10,054	2	20
Indiana	2,342,221	2,092,484	229,850	14,914	3,600	1,370	1	2
Illinois	4,685,831	4,243,275	420,254	7,366	2,977	11,954	2	3
Michigan	3,927,216	3,545,031	361,976	14,355	3,668	2,183	—	3
Wisconsin	2,156,476	1,915,824	230,877	4,683	4,194	774	—	124
East North Central	**17,664,771**	**15,883,648**	**1,663,761**	**70,167**	**20,703**	**26,335**	**5**	**152**
Minnesota	1,872,033	1,678,057	176,281	9,289	3,218	5,186	—	2
Iowa	1,284,554	1,119,686	152,774	4,313	1,498	6,280	—	3
Missouri	2,291,551	2,032,094	238,426	11,614	3,658	5,693	1	65
North Dakota	300,784	254,929	41,351	2,740	701	1,060	—	3
South Dakota	319,577	276,518	40,354	903	836	964	—	2
Nebraska	767,568	635,326	123,855	3,201	1,040	4,143	—	3
Kansas	1,163,593	996,445	154,194	9,818	2,313	822	—	1
West North Central	**7,999,660**	**6,993,055**	**927,235**	**41,878**	**13,264**	**24,148**	**1**	**79**
Delaware	289,840	261,503	27,138	695	492	11	—	1
Maryland	1,790,466	1,615,500	168,583	5,501	869	10	2	1
District of Columbia	212,476	186,419	25,849	171	36	—	1	—
Virginia	2,438,351	2,174,341	233,729	4,418	1,951	23,912	—	—
West Virginia	839,912	736,292	90,560	10,377	2,384	299	—	—
North Carolina	3,007,966	2,628,182	354,043	13,597	9,524	2,491	—	129
South Carolina	1,535,402	1,341,128	183,107	5,248	3,381	2,525	—	13
Georgia	2,769,707	2,477,665	264,475	18,974	6,275	2,317	1	—
Florida	5,960,429	5,278,622	635,759	27,647	5,747	12,650	1	3
South Atlantic	**18,844,549**	**16,699,652**	**1,983,243**	**86,628**	**30,659**	**44,215**	**5**	**147**
Kentucky	1,616,879	1,429,451	167,728	6,809	4,833	8,049	—	9
Tennessee	2,172,687	1,921,699	230,831	17,440	1,052	1,646	—	19
Alabama	1,801,823	1,584,190	205,531	8,586	2,308	1,197	—	11
Mississippi	1,098,600	957,957	130,799	5,130	893	3,820	—	1
East South Central	**6,689,989**	**5,893,297**	**734,889**	**37,965**	**9,086**	**14,712**	**—**	**40**
Arkansas	1,105,049	967,826	114,282	18,482	1,027	3,432	—	—
Louisiana	1,800,934	1,588,019	183,903	16,851	2,365	9,794	—	2
Oklahoma	1,537,344	1,328,502	182,591	15,244	1,238	9,769	—	—
Texas	7,038,891	6,112,796	834,638	61,331	3,894	26,014	—	218
West South Central	**11,482,218**	**9,997,143**	**1,315,414**	**111,908**	**8,524**	**49,009**	**—**	**220**
Montana	406,295	340,913	59,306	2,515	3,172	152	—	237
Idaho	455,634	385,586	67,716	1,722	548	62	—	—
Wyoming	240,372	197,029	40,273	2,417	409	240	—	4
Colorado	1,544,167	1,348,086	193,266	1,390	886	539	—	—
New Mexico	639,719	547,806	85,867	4,723	313	944	—	66
Arizona	1,511,335	1,340,570	155,357	4,492	8,646	2,252	1	17
Utah	609,262	543,041	57,795	6,228	1,869	319	—	10
Nevada	473,172	410,644	61,441	615	344	127	—	1
Mountain	**5,879,956**	**5,113,675**	**721,021**	**24,102**	**16,187**	**4,635**	**1**	**335**
Washington	2,042,185	1,815,121	217,002	6,193	3,647	184	1	37
Oregon	1,240,951	1,079,203	158,234	2,241	1,142	119	—	12
California	11,263,917	9,854,410	1,349,000	34,894	24,256	390	3	964
Pacific	**14,547,053**	**12,748,734**	**1,724,236**	**43,328**	**29,045**	**693**	**4**	**1,013**
Alaska	218,082	186,942	29,031	539	796	772	—	2
Hawaii	347,086	299,758	45,176	659	1,493	—	—	—
Alaska & Hawaii	**565,168**	**486,700**	**74,207**	**1,198**	**2,289**	**772**	**—**	**2**

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TABLE 50B

ULTIMATE CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
AT DECEMBER 31, 1986r

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**102,952,793**	**90,994,586**	**11,114,300**	**498,254**	**161,377**	**182,257**	**26**	**1,991**
Maine	587,945	525,761	58,647	2,368	1,062	105	—	2
New Hampshire	506,127	442,117	60,453	1,527	1,470	560	—	—
Vermont	268,759	235,929	28,816	1,434	302	2,271	—	7
Massachusetts	2,448,108	2,180,004	249,141	11,722	4,739	2,502	—	—
Rhode Island	406,697	363,715	39,496	2,650	806	30	—	—
Connecticut	1,355,387	1,234,350	112,444	4,791	3,764	31	1	6
New England	**5,573,023**	**4,981,876**	**548,997**	**24,492**	**12,143**	**5,499**	**1**	**15**
New York	6,827,785	6,035,432	756,718	10,198	9,773	15,656	5	3
New Jersey	3,114,890	2,744,142	350,983	12,525	7,238	—	1	1
Pennsylvania	4,962,602	4,437,792	488,185	28,763	7,120	737	4	1
Middle Atlantic	**14,905,277**	**13,217,366**	**1,595,886**	**51,486**	**24,131**	**16,393**	**10**	**5**
Ohio	4,498,020	4,041,645	411,897	28,261	6,164	10,033	2	18
Indiana	2,316,667	2,071,464	218,887	21,490	3,452	1,371	1	2
Illinois	4,652,448	4,216,492	414,180	7,200	2,985	11,586	2	3
Michigan	3,871,336	3,499,079	352,846	14,097	3,143	2,168	—	3
Wisconsin	2,128,284	1,891,686	226,889	4,590	4,210	785	—	124
East North Central	**17,466,755**	**15,720,366**	**1,624,695**	**75,638**	**19,954**	**25,943**	**5**	**150**
Minnesota	1,835,736	1,645,992	172,357	9,109	3,141	5,137	—	2
Iowa	1,279,251	1,115,712	151,853	4,335	1,485	5,863	—	3
Missouri	2,272,734	2,019,237	232,621	11,761	3,620	5,431	1	63
North Dakota	299,745	254,296	41,048	2,634	699	1,065	—	3
South Dakota	317,454	274,861	39,761	910	938	982	—	2
Nebraska	765,602	634,646	122,472	3,250	1,046	4,185	—	3
Kansas	1,150,748	985,759	152,082	9,831	2,254	806	—	16
West North Central	**7,921,272**	**6,930,503**	**912,194**	**41,830**	**13,183**	**23,469**	**1**	**92**
Delaware	280,014	253,200	25,643	693	466	11	—	1
Maryland	1,734,312	1,566,128	162,004	5,326	841	10	2	1
District of Columbia	209,858	184,357	25,295	169	36	—	1	—
Virginia	2,363,682	2,110,460	223,885	4,337	1,919	23,080	1	—
West Virginia	831,954	731,734	88,617	10,137	1,166	297	—	3
North Carolina	2,933,488	2,565,702	343,025	13,476	8,683	2,473	—	129
South Carolina	1,496,773	1,308,792	176,840	5,380	3,275	2,472	—	14
Georgia	2,677,850	2,398,246	251,854	19,320	6,160	2,269	1	—
Florida	5,843,814	5,182,101	618,183	26,255	5,426	11,845	1	3
South Atlantic	**18,371,745**	**16,300,720**	**1,915,346**	**85,093**	**27,972**	**42,457**	**6**	**151**
Kentucky	1,594,387	1,410,369	164,530	6,720	4,507	8,250	—	11
Tennessee	2,117,722	1,878,934	219,695	16,533	939	1,602	—	19
Alabama	1,765,971	1,555,862	198,301	8,280	2,317	1,200	—	11
Mississippi	1,084,666	946,961	127,966	5,117	869	3,752	—	1
East South Central	**6,562,746**	**5,792,126**	**710,492**	**36,650**	**8,632**	**14,804**	**—**	**42**
Arkansas	1,090,843	955,979	112,379	18,150	1,010	3,325	—	—
Louisiana	1,831,275	1,615,895	186,278	17,529	2,385	9,186	—	2
Oklahoma	1,560,839	1,349,411	185,751	15,053	1,246	9,378	—	—
Texas	7,163,876	6,212,866	858,501	62,258	3,981	26,052	—	218
West South Central	**11,646,833**	**10,134,151**	**1,342,909**	**112,990**	**8,622**	**47,941**	**—**	**220**
Montana	403,528	339,162	58,254	2,594	3,125	153	—	240
Idaho	452,565	383,328	67,002	1,622	548	65	—	—
Wyoming	243,935	200,035	40,570	2,670	412	244	—	4
Colorado	1,541,955	1,338,726	200,079	1,692	914	540	—	4
New Mexico	627,849	537,145	84,734	4,821	179	904	—	66
Arizona	1,453,372	1,288,151	149,544	4,909	8,775	1,975	1	17
Utah	602,157	536,264	56,463	7,280	1,804	332	—	14
Nevada	449,964	390,282	58,666	555	345	115	—	1
Mountain	**5,775,325**	**5,013,093**	**715,312**	**26,143**	**16,102**	**4,328**	**1**	**346**
Washington	2,019,247	1,795,872	213,395	6,265	3,555	131	1	28
Oregon	1,225,402	1,068,118	154,054	1,980	1,126	113	—	11
California	10,930,541	9,562,792	1,307,940	34,788	23,696	393	3	929
Pacific	**14,175,190**	**12,426,782**	**1,675,389**	**43,033**	**28,377**	**637**	**4**	**968**
Alaska	217,064	186,381	28,912	247	736	786	—	2
Hawaii	337,563	291,222	44,164	652	1,525	—	—	—
Alaska & Hawaii	**554,627**	**477,603**	**73,076**	**899**	**2,261**	**786**	**—**	**2**

r Revised.

TABLE 51A

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1987p

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**80,234,039**	**70,826,677**	**8,768,187**	**260,469**	**128,855**	**149,404**	**21**	**426**
Maine	579,748	517,039	59,414	2,166	1,042	87	—	—
New Hampshire	462,272	402,380	56,520	1,467	1,467	438	—	—
Vermont	215,081	187,904	26,299	133	270	475	—	—
Massachusetts	2,180,808	1,935,994	229,653	8,033	4,784	2,344	—	—
Rhode Island	412,319	368,056	40,740	2,670	825	28	—	—
Connecticut	1,330,639	1,212,222	109,922	4,652	3,842	—	1	—
New England	**5,180,867**	**4,623,595**	**522,548**	**19,121**	**12,230**	**3,372**	**1**	**—**
New York	6,765,069	5,969,907	762,166	7,842	9,576	15,572	4	2
New Jersey	3,129,610	2,753,044	356,896	12,214	7,454	—	1	1
Pennsylvania	4,797,865	4,278,725	483,370	28,885	6,412	468	4	1
Middle Atlantic	**14,692,544**	**13,001,676**	**1,602,432**	**48,941**	**23,442**	**16,040**	**9**	**4**
Ohio	4,024,520	3,609,174	372,959	27,194	5,712	9,461	2	18
Indiana	1,803,884	1,599,041	190,411	10,707	2,806	916	1	2
Illinois	4,296,946	3,887,181	390,728	5,558	2,605	10,869	2	3
Michigan	3,491,094	3,150,640	323,664	12,301	2,926	1,560	—	3
Wisconsin	1,791,063	1,598,497	185,600	2,623	3,692	624	—	27
East North Central	**15,407,507**	**13,844,533**	**1,463,362**	**58,383**	**17,741**	**23,430**	**5**	**53**
Minnesota	1,139,427	1,005,999	122,318	5,976	2,152	2,980	—	2
Iowa	936,290	803,601	124,141	2,385	891	5,269	—	3
Missouri	1,544,620	1,358,952	172,253	7,841	2,157	3,378	—	39
North Dakota	196,639	165,408	28,650	1,598	394	587	—	2
South Dakota	172,217	145,096	25,803	423	380	514	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	770,755	676,905	85,040	7,578	1,026	205	—	1
West North Central	**4,759,948**	**4,155,961**	**558,205**	**25,801**	**7,000**	**12,933**	**—**	**48**
Delaware	212,176	191,121	20,435	415	204	—	—	1
Maryland	1,670,621	1,505,790	158,749	5,299	780	—	2	1
District of Columbia	212,476	186,419	25,849	171	36	—	1	—
Virginia	2,063,080	1,835,959	199,345	3,375	1,797	22,604	—	—
West Virginia	831,780	729,117	89,632	10,361	2,371	299	—	—
North Carolina	2,045,989	1,754,574	272,407	10,345	7,078	1,571	—	14
South Carolina	938,006	801,703	128,894	3,419	2,359	1,618	—	13
Georgia	1,591,630	1,395,815	180,857	12,343	1,964	650	1	—
Florida	4,688,900	4,154,819	495,780	22,107	4,989	11,201	1	3
South Atlantic	**14,254,658**	**12,555,317**	**1,571,948**	**67,835**	**21,578**	**37,943**	**5**	**32**
Kentucky	935,885	808,892	110,650	4,421	4,367	7,554	—	1
Tennessee	37,142	33,152	3,703	133	119	35	—	—
Alabama	1,090,219	950,101	134,533	4,955	629	—	—	1
Mississippi	510,178	434,850	68,437	3,863	496	2,532	—	—
East South Central	**2,573,424**	**2,226,995**	**317,323**	**13,372**	**5,611**	**10,121**	**—**	**2**
Arkansas	686,506	591,204	75,444	17,473	514	1,871	—	—
Louisiana	1,382,958	1,214,066	144,082	13,257	2,202	9,349	—	2
Oklahoma	1,040,055	901,668	115,655	12,987	1,087	8,658	—	—
Texas	5,155,676	4,476,787	600,366	52,066	3,306	23,150	—	1
West South Central	**8,265,195**	**7,183,725**	**935,547**	**95,783**	**7,109**	**43,028**	**—**	**3**
Montana	297,824	249,112	43,102	2,461	2,817	123	—	209
Idaho	380,391	320,738	57,709	1,399	502	43	—	—
Wyoming	153,409	128,341	22,916	1,922	158	68	—	4
Colorado	992,286	880,299	111,107	166	463	251	—	—
New Mexico	452,949	395,405	52,273	4,173	204	852	—	42
Arizona	861,556	760,295	96,002	3,638	714	906	—	1
Utah	470,669	422,807	39,996	6,110	1,704	49	—	3
Nevada	447,474	389,722	57,090	544	101	17	—	—
Mountain	**4,056,558**	**3,546,719**	**460,195**	**20,413**	**6,663**	**2,309**	**—**	**259**
Washington	941,360	838,872	97,783	3,209	1,494	1	—	1
Oregon	980,676	851,655	126,283	1,657	1,005	73	—	3
California	8,760,431	7,686,417	1,045,674	4,881	23,404	33	1	21
Pacific	**10,682,467**	**9,376,944**	**1,269,740**	**9,747**	**25,903**	**107**	**1**	**25**
Alaska	13,785	11,454	1,711	414	85	121	—	—
Hawaii	347,086	299,758	45,176	659	1,493	—	—	—
Alaska & Hawaii	**360,871**	**311,212**	**46,887**	**1,073**	**1,578**	**121**	**—**	**—**

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TABLE 51B

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
AT DECEMBER 31, 1986r

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**78,717,500**	**69,548,070**	**8,535,188**	**364,294**	**123,525**	**145,957**	**22**	**444**
Maine	562,527	503,290	55,878	2,235	1,038	86	—	—
New Hampshire	444,515	387,663	53,381	1,466	1,452	553	—	—
Vermont	208,766	182,741	22,883	670	268	2,204	—	—
Massachusetts	2,140,504	1,903,959	221,590	7,967	4,680	2,308	—	—
Rhode Island	403,289	360,665	39,159	2,631	805	29	—	—
Connecticut	1,296,537	1,182,235	105,908	4,650	3,743	—	1	—
New England	**5,056,138**	**4,520,553**	**498,799**	**19,619**	**11,986**	**5,180**	**1**	**—**
New York	6,675,117	5,900,839	741,300	7,853	9,684	15,434	4	3
New Jersey	3,058,360	2,693,385	345,489	12,266	7,218	—	1	1
Pennsylvania	4,728,637	4,221,135	472,471	28,260	6,322	444	4	1
Middle Atlantic	**14,462,114**	**12,815,359**	**1,559,260**	**48,379**	**23,224**	**15,878**	**9**	**5**
Ohio	3,974,778	3,568,656	364,551	26,517	5,606	9,430	2	16
Indiana	1,773,902	1,573,590	179,407	17,283	2,689	930	1	2
Illinois	4,257,471	3,854,252	384,746	5,371	2,610	10,487	2	3
Michigan	3,439,459	3,108,881	314,563	12,062	2,403	1,547	—	3
Wisconsin	1,765,170	1,576,542	181,717	2,579	3,677	628	—	27
East North Central	**15,210,780**	**13,681,921**	**1,424,984**	**63,812**	**16,985**	**23,022**	**5**	**51**
Minnesota	1,115,445	985,560	118,961	5,805	2,124	2,993	—	2
Iowa	931,589	800,181	123,272	2,394	880	4,859	—	3
Missouri	1,514,369	1,334,188	167,004	7,949	2,102	3,089	—	37
North Dakota	195,758	164,907	28,442	1,427	390	590	—	2
South Dakota	169,998	143,669	25,296	430	281	321	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	758,611	666,545	83,287	7,555	1,004	204	—	16
West North Central	**4,685,770**	**4,095,050**	**546,262**	**25,560**	**6,781**	**12,056**	**—**	**61**
Delaware	204,348	184,305	19,428	413	201	—	—	1
Maryland	1,618,709	1,460,265	152,559	5,124	758	—	2	1
District of Columbia	209,858	184,357	25,295	169	36	—	1	—
Virginia	1,999,661	1,781,993	190,808	3,314	1,764	21,781	1	—
West Virginia	823,875	724,600	87,701	10,121	1,153	297	—	3
North Carolina	1,991,357	1,710,519	262,878	10,126	6,260	1,560	—	14
South Carolina	917,136	785,424	124,530	3,365	2,245	1,558	—	14
Georgia	1,547,521	1,358,934	173,694	12,351	1,917	624	1	—
Florida	4,504,655	3,997,105	471,365	21,157	4,655	10,369	1	3
South Atlantic	**13,817,120**	**12,187,502**	**1,508,258**	**66,140**	**18,989**	**36,189**	**6**	**36**
Kentucky	924,154	800,111	108,287	4,362	3,898	7,495	—	1
Tennessee	36,557	32,652	3,620	128	119	38	—	—
Alabama	1,070,678	934,798	130,540	4,725	614	—	—	1
Mississippi	505,545	431,209	67,525	3,854	478	2,479	—	—
East South Central	**2,536,934**	**2,198,770**	**309,972**	**13,069**	**5,109**	**10,012**	**—**	**2**
Arkansas	679,054	585,409	74,200	17,144	506	1,795	—	—
Louisiana	1,385,087	1,215,606	144,599	13,934	2,219	8,727	—	2
Oklahoma	1,047,136	909,020	115,944	12,752	1,101	8,319	—	—
Texas	5,121,345	4,445,311	598,270	52,275	3,254	22,234	—	1
West South Central	**8,232,622**	**7,155,346**	**933,013**	**96,105**	**7,080**	**41,075**	**—**	**3**
Montana	297,407	249,385	42,406	2,506	2,772	123	—	215
Idaho	377,650	318,768	56,981	1,352	503	46	—	—
Wyoming	156,568	130,982	23,394	1,955	161	72	—	4
Colorado	997,602	878,074	118,630	144	496	258	—	—
New Mexico	443,301	387,126	50,976	4,256	81	820	—	42
Arizona	829,456	731,080	92,695	3,919	839	922	—	1
Utah	463,756	416,219	38,665	7,163	1,643	63	—	3
Nevada	424,309	369,564	54,141	484	103	17	—	—
Mountain	**3,990,049**	**3,481,198**	**477,888**	**21,779**	**6,598**	**2,321**	**—**	**265**
Washington	918,495	819,305	94,805	2,917	1,467	1	—	—
Oregon	968,659	843,474	122,706	1,414	995	68	—	2
California	8,486,414	7,445,923	1,012,952	4,727	22,765	27	1	19
Pacific	**10,373,568**	**9,108,702**	**1,230,463**	**9,058**	**25,227**	**96**	**1**	**21**
Alaska	14,842	12,447	2,125	121	21	128	—	—
Hawaii	337,563	291,222	44,164	652	1,525	—	—	—
Alaska & Hawaii	**352,405**	**303,669**	**46,289**	**773**	**1,546**	**128**	**—**	**—**

r Revised.

TABLE 52A

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1987p

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**103,662,175**	**91,566,733**	**11,244,824**	**497,526**
Maine	596,595	532,410	60,656	2,355
New Hampshire	519,729	453,685	62,636	1,482
Vermont	274,597	240,706	32,051	1,008
Massachusetts	2,488,710	2,211,830	256,320	13,099
Rhode Island	411,371	367,427	40,410	2,683
Connecticut	1,373,209	1,249,780	114,801	4,786
New England	**5,664,211**	**5,055,838**	**566,874**	**25,413**
New York	6,877,408	6,071,900	769,451	10,185
New Jersey	3,156,699	2,779,325	357,488	12,381
Pennsylvania	4,996,573	4,465,265	494,372	29,000
Middle Atlantic	**15,030,680**	**13,316,490**	**1,621,311**	**51,566**
Ohio	4,525,165	4,063,285	417,123	28,513
Indiana	2,327,013	2,079,024	228,415	14,637
Illinois	4,667,792	4,228,154	417,537	7,304
Michigan	3,903,405	3,525,119	358,175	14,274
Wisconsin	2,141,783	1,903,083	228,934	4,662
East North Central	**17,565,158**	**15,798,665**	**1,650,184**	**69,390**
Minnesota	1,858,037	1,665,443	174,976	9,210
Iowa	1,281,760	1,117,318	152,331	4,326
Missouri	2,273,439	2,016,703	235,840	11,633
North Dakota	299,993	254,161	41,372	2,692
South Dakota	318,636	275,583	40,337	909
Nebraska	765,199	633,440	123,486	3,204
Kansas	1,156,429	989,885	153,482	9,812
West North Central	**7,953,493**	**6,952,533**	**921,824**	**41,786**
Delaware	285,969	258,117	26,655	694
Maryland	1,765,431	1,593,472	165,664	5,424
District of Columbia	211,002	185,174	25,621	170
Virginia	2,405,594	2,146,306	229,471	4,386
West Virginia	836,822	734,040	89,823	10,273
North Carolina	2,986,887	2,611,105	350,357	13,450
South Carolina	1,526,384	1,333,930	181,369	5,226
Georgia	2,740,140	2,453,315	259,273	18,997
Florida	5,845,969	5,177,234	624,253	26,698
South Atlantic	**18,604,198**	**16,492,693**	**1,952,486**	**85,318**
Kentucky	1,611,690	1,425,568	166,577	6,811
Tennessee	2,155,095	1,908,976	226,456	17,016
Alabama	1,786,577	1,571,834	202,746	8,482
Mississippi	1,094,364	954,835	129,680	5,157
East South Central	**6,647,726**	**5,861,213**	**725,459**	**37,466**
Arkansas	1,102,478	964,072	113,854	20,120
Louisiana	1,801,370	1,588,316	184,171	17,138
Oklahoma	1,538,967	1,330,383	182,652	15,133
Texas	7,023,869	6,098,352	834,556	61,297
West South Central	**11,466,684**	**9,981,123**	**1,315,233**	**113,688**
Montana	406,618	340,358	59,069	3,556
Idaho	455,644	384,478	67,485	3,067
Wyoming	241,331	197,715	40,527	2,431
Colorado	1,537,872	1,342,439	192,607	1,382
New Mexico	633,504	542,532	84,951	4,732
Arizona	1,476,480	1,308,355	152,638	4,602
Utah	604,848	538,398	57,131	7,158
Nevada	461,945	400,751	60,145	579
Mountain	**5,818,242**	**5,055,026**	**714,553**	**27,507**
Washington	2,024,896	1,796,855	218,179	6,015
Oregon	1,237,830	1,074,233	160,155	2,171
California	11,089,381	9,700,267	1,324,961	36,012
Pacific	**14,352,107**	**12,571,355**	**1,703,295**	**44,198**
Alaska	217,461	186,440	28,912	539
Hawaii	342,215	295,357	44,693	655
Alaska & Hawaii	**559,676**	**481,797**	**73,605**	**1,194**

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TABLE 52B

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1986r

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**102,066,062**	**90,214,936**	**11,003,382**	**503,914**
Maine	580,971	516,418	60,984	2,398
New Hampshire	495,574	433,241	58,825	1,498
Vermont	266,760	234,365	28,370	1,441
Massachusetts	2,424,559	2,160,221	245,234	11,844
Rhode Island	402,485	360,260	38,762	2,632
Connecticut	1,340,249	1,220,858	110,777	4,810
New England	**5,510,598**	**4,925,363**	**542,952**	**24,623**
New York	6,785,335	6,002,922	746,865	10,249
New Jersey	3,086,619	2,721,025	345,799	12,583
Pennsylvania	4,931,649	4,410,872	484,247	28,694
Middle Atlantic	**14,803,603**	**13,134,619**	**1,576,911**	**51,526**
Ohio	4,471,795	4,018,677	408,699	28,102
Indiana	2,303,263	2,059,335	217,766	21,351
Illinois	4,630,615	4,195,709	413,272	7,155
Michigan	3,846,966	3,478,317	349,383	14,019
Wisconsin	2,115,907	1,881,064	225,336	4,551
East North Central	**17,368,546**	**15,633,102**	**1,614,456**	**75,178**
Minnesota	1,825,669	1,636,712	171,753	8,962
Iowa	1,277,170	1,114,035	151,401	4,354
Missouri	2,255,307	2,004,101	230,440	11,772
North Dakota	299,311	253,880	41,036	2,625
South Dakota	316,701	274,080	39,802	897
Nebraska	761,943	631,411	122,144	3,250
Kansas	1,142,098	977,877	151,153	10,020
West North Central	**7,878,199**	**6,892,096**	**907,729**	**41,880**
Delaware	277,726	251,210	25,343	705
Maryland	1,709,966	1,544,690	159,191	5,235
District of Columbia	208,255	182,924	25,125	169
Virginia	2,328,906	2,080,325	219,500	4,355
West Virginia	827,671	728,185	87,899	10,132
North Carolina	2,904,816	2,540,354	339,439	13,397
South Carolina	1,487,504	1,301,230	175,104	5,361
Georgia	2,646,042	2,371,480	246,839	19,330
Florida	5,726,447	5,078,966	604,796	25,782
South Atlantic	**18,117,333**	**16,079,364**	**1,883,326**	**84,466**
Kentucky	1,588,895	1,405,584	163,705	6,737
Tennessee	2,098,993	1,863,219	216,967	16,317
Alabama	1,750,492	1,543,089	195,616	8,234
Mississippi	1,080,095	943,339	127,134	5,063
East South Central	**6,518,475**	**5,755,231**	**703,422**	**36,351**
Arkansas	1,088,087	951,885	112,056	19,847
Louisiana	1,833,365	1,617,280	186,424	18,243
Oklahoma	1,566,713	1,354,465	186,440	15,066
Texas	7,146,829	6,194,951	858,966	62,941
West South Central	**11,634,994**	**10,118,581**	**1,343,886**	**116,097**
Montana	403,178	338,103	58,009	3,561
Idaho	451,297	381,973	66,004	2,709
Wyoming	243,572	199,879	40,304	2,717
Colorado	1,511,904	1,319,068	189,714	1,661
New Mexico	619,628	529,737	83,893	4,861
Arizona	1,409,698	1,247,462	146,723	5,023
Utah	595,867	530,168	55,949	7,644
Nevada	439,572	381,315	57,248	549
Mountain	**5,674,716**	**4,927,705**	**697,844**	**28,725**
Washington	2,003,988	1,779,677	214,348	6,256
Oregon	1,222,073	1,062,661	156,170	1,981
California	10,782,252	9,431,579	1,289,782	35,905
Pacific	**14,008,313**	**12,273,917**	**1,660,300**	**44,142**
Alaska	217,582	186,869	28,942	248
Hawaii	333,703	287,889	43,614	678
Alaska & Hawaii	**551,285**	**474,758**	**72,556**	**926**

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TABLE 53A

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1987p

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**79,466,204**	**70,155,400**	**8,672,013**	**363,048**
Maine	570,494	509,448	57,705	2,214
New Hampshire	454,330	395,948	55,042	1,438
Vermont	212,443	185,731	25,829	133
Massachusetts	2,175,134	1,931,976	227,890	8,089
Rhode Island	407,810	364,272	40,025	2,664
Connecticut	1,313,561	1,197,051	108,076	4,649
New England	**5,133,772**	**4,584,426**	**514,567**	**19,187**
New York	6,724,376	5,936,961	754,013	7,840
New Jersey	3,099,606	2,728,105	351,893	12,123
Pennsylvania	4,760,007	4,246,308	478,339	28,513
Middle Atlantic	**14,583,989**	**12,911,374**	**1,584,245**	**48,476**
Ohio	3,996,658	3,585,425	369,278	26,858
Indiana	1,788,568	1,585,544	188,906	10,427
Illinois	4,279,264	3,872,319	388,109	5,496
Michigan	3,465,325	3,129,131	319,499	12,223
Wisconsin	1,776,502	1,585,869	183,676	2,602
East North Central	**15,306,317**	**13,758,288**	**1,449,468**	**57,606**
Minnesota	1,125,315	993,268	121,015	5,897
Iowa	933,496	801,233	123,698	2,398
Missouri	1,528,998	1,345,759	169,922	7,897
North Dakota	195,848	164,640	28,671	1,550
South Dakota	171,276	144,161	25,786	429
Nebraska	—	—	—	—
Kansas	763,361	670,327	84,232	7,574
West North Central	**4,718,294**	**4,119,388**	**553,324**	**25,745**
Delaware	208,305	187,735	19,952	414
Maryland	1,645,586	1,483,762	155,830	5,222
District of Columbia	211,002	185,174	25,621	170
Virginia	2,030,727	1,808,153	195,268	3,338
West Virginia	828,690	726,865	88,895	10,257
North Carolina	2,025,572	1,737,954	268,919	10,203
South Carolina	928,988	794,505	127,156	3,397
Georgia	1,563,461	1,372,397	176,127	12,362
Florida	4,577,947	4,056,728	484,159	21,483
South Atlantic	**14,020,278**	**12,353,273**	**1,541,927**	**66,846**
Kentucky	932,035	805,933	109,938	4,399
Tennessee	36,777	32,842	3,653	132
Alabama	1,078,907	940,836	132,632	4,814
Mississippi	507,876	433,073	67,931	3,871
East South Central	**2,555,595**	**2,212,684**	**314,154**	**13,216**
Arkansas	683,935	587,450	75,016	19,111
Louisiana	1,383,394	1,214,363	144,350	13,544
Oklahoma	1,041,678	903,549	115,716	12,876
Texas	5,138,039	4,460,060	600,010	52,008
West South Central	**8,247,046**	**7,165,422**	**935,092**	**97,539**
Montana	298,147	248,557	42,865	3,502
Idaho	380,401	319,630	57,478	2,744
Wyoming	154,368	129,027	23,170	1,936
Colorado	986,938	875,597	110,452	156
New Mexico	446,734	390,131	51,357	4,182
Arizona	840,716	740,963	94,315	3,744
Utah	466,255	418,164	39,332	7,040
Nevada	436,247	379,829	55,794	508
Mountain	**4,009,806**	**3,501,898**	**474,763**	**23,812**
Washington	932,592	828,891	99,178	3,037
Oregon	977,982	847,098	128,218	1,587
California	8,624,533	7,565,847	1,030,673	4,928
Pacific	**10,535,107**	**9,241,838**	**1,258,069**	**9,552**
Alaska	13,785	11,454	1,711	414
Hawaii	342,215	295,357	44,693	655
Alaska & Hawaii	**356,000**	**306,811**	**46,404**	**1,069**

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TABLE 53B

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE—YEAR 1986r

Division/State	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**77,929,188**	**68,853,285**	**8,438,370**	**369,030**
Maine	555,553	493,947	58,215	2,265
New Hampshire	433,962	378,787	51,753	1,437
Vermont	206,767	181,177	22,437	677
Massachusetts	2,117,766	1,884,684	217,987	8,087
Rhode Island	399,077	357,210	38,425	2,613
Connecticut	1,281,896	1,169,144	104,339	4,666
New England	**4,995,021**	**4,464,949**	**493,156**	**19,745**
New York	6,632,698	5,868,373	731,432	7,906
New Jersey	3,030,049	2,670,263	340,269	12,325
Pennsylvania	4,697,684	4,194,215	468,533	28,191
Middle Atlantic	**14,360,431**	**12,732,851**	**1,540,234**	**48,422**
Ohio	3,948,553	3,545,688	361,353	26,358
Indiana	1,760,680	1,561,656	178,275	17,142
Illinois	4,236,210	3,833,958	383,922	5,325
Michigan	3,414,564	3,087,690	311,004	11,984
Wisconsin	1,752,835	1,565,958	180,169	2,539
East North Central	**15,112,842**	**13,594,950**	**1,414,723**	**63,348**
Minnesota	1,105,296	976,217	118,340	5,658
Iowa	929,507	798,504	122,820	2,413
Missouri	1,497,956	1,319,911	165,024	7,914
North Dakota	195,324	164,491	28,430	1,418
South Dakota	169,245	142,888	25,337	417
Nebraska	—	—	—	—
Kansas	750,253	659,028	82,299	7,729
West North Central	**4,647,581**	**4,061,039**	**542,250**	**25,549**
Delaware	202,060	182,315	19,128	425
Maryland	1,594,363	1,438,827	149,746	5,033
District of Columbia	208,255	182,924	25,125	169
Virginia	1,965,292	1,752,090	186,689	3,331
West Virginia	819,592	721,051	86,983	10,116
North Carolina	1,963,700	1,685,748	259,727	10,048
South Carolina	907,867	777,862	122,794	3,346
Georgia	1,517,103	1,333,364	168,865	12,366
Florida	4,394,071	3,899,445	459,132	20,837
South Atlantic	**13,572,303**	**11,973,626**	**1,478,189**	**65,671**
Kentucky	919,516	796,141	107,445	4,421
Tennessee	36,216	32,350	3,583	128
Alabama	1,059,886	925,785	128,793	4,664
Mississippi	503,187	429,399	67,058	3,825
East South Central	**2,518,805**	**2,183,675**	**306,879**	**13,038**
Arkansas	676,298	581,315	73,877	18,841
Louisiana	1,387,177	1,216,991	144,745	14,648
Oklahoma	1,053,010	914,074	116,633	12,765
Texas	5,098,662	4,423,182	597,559	52,810
West South Central	**8,215,147**	**7,135,562**	**932,814**	**99,064**
Montana	297,057	248,326	42,161	3,473
Idaho	376,382	317,413	55,983	2,439
Wyoming	156,205	130,826	23,128	2,002
Colorado	970,405	861,064	108,467	118
New Mexico	435,079	379,718	50,135	4,296
Arizona	805,985	709,008	91,195	4,016
Utah	457,466	410,123	38,151	7,527
Nevada	413,917	360,597	52,723	478
Mountain	**3,912,496**	**3,417,075**	**461,943**	**24,349**
Washington	909,616	809,431	95,835	2,904
Oregon	965,792	838,426	124,877	1,415
California	8,370,609	7,341,365	1,001,731	4,726
Pacific	**10,246,017**	**8,989,222**	**1,222,443**	**9,045**
Alaska	14,842	12,447	2,125	121
Hawaii	333,703	287,889	43,614	678
Alaska & Hawaii	**348,545**	**300,336**	**45,739**	**799**

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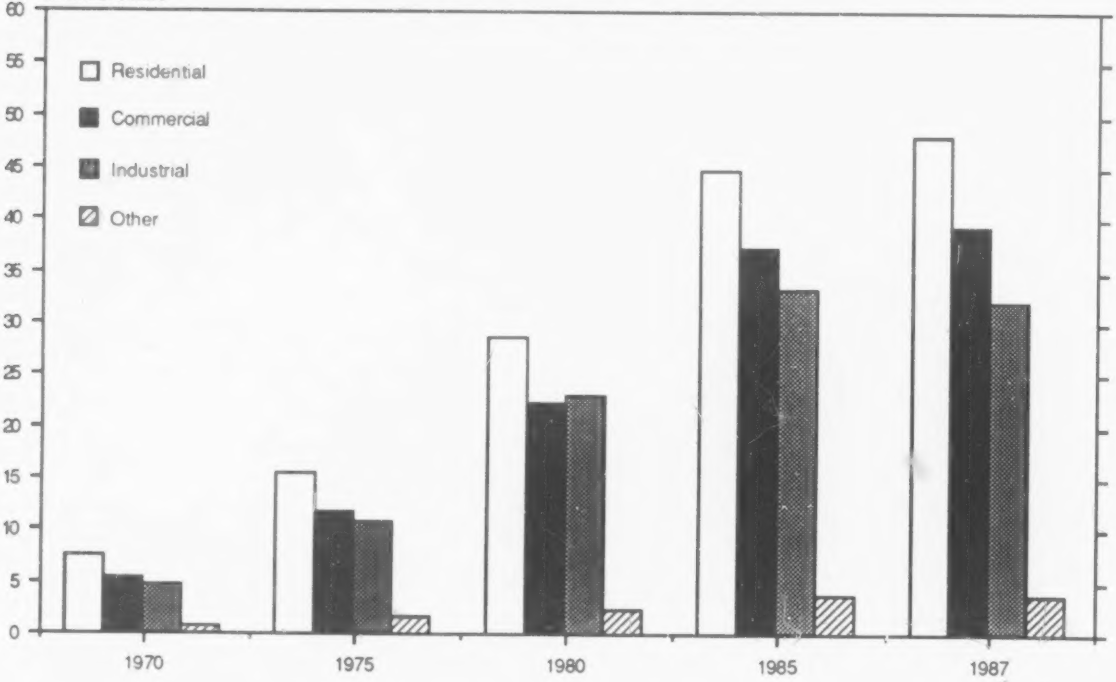
REVENUES

SECTION VIII

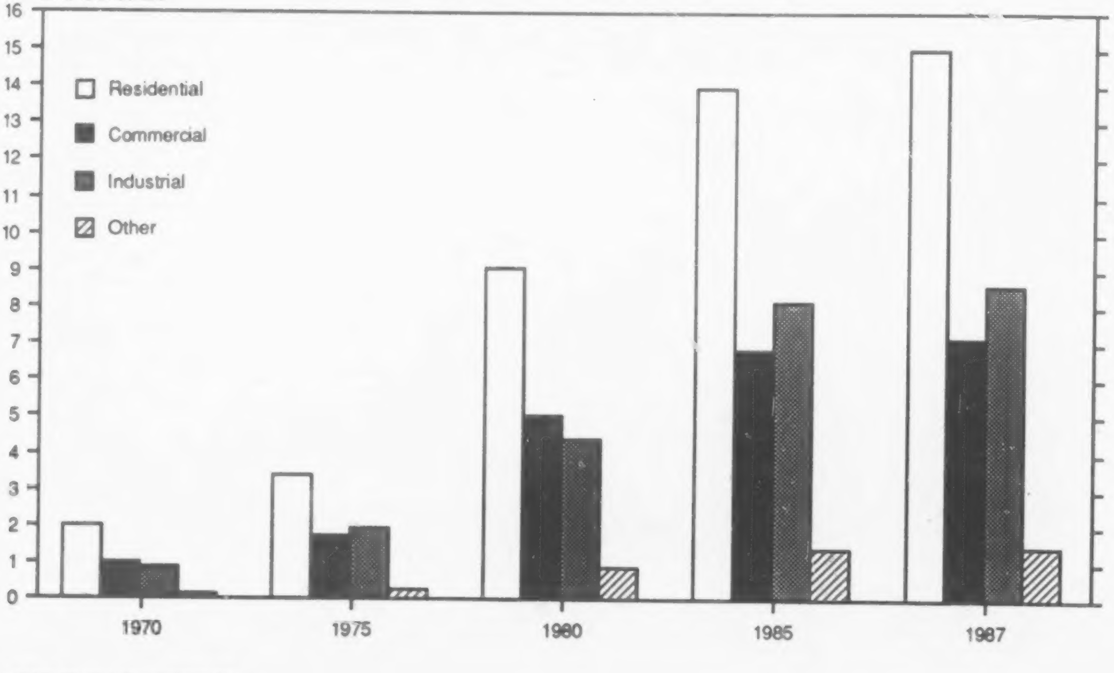
Chart VIII-A

REVENUE FROM ULTIMATE CUSTOMERS

INVESTOR-OWNED UTILITIES



NON-INVESTOR-OWNED UTILITIES



Based on Tables 56 and 57, on page 65.

TABLE 56

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenue from Sales †	Exports to Canada and Mexico	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1987p	**$155,556,626**	**$33,407**	**$155,523,219**	**$62,951,554**	**$46,604,260**	**$40,725,354**	**$1,508,199**	**$3,245,337**	**$301,048**	**$187,467**
1986r	152,480,811	13,688	152,467,123	60,910,603	45,410,286	40,906,054	1,498,431	3,214,164	311,971	215,614
1985	149,187,568	25,216	149,162,352	58,591,751	44,060,554	41,367,847	1,476,092	3,163,473	313,165	189,470
1984	143,114,300	21,796	143,092,504	56,116,141	41,253,720	40,795,789	1,375,931	3,044,623	302,725	203,574
1983	129,596,675	7,874	129,588,801	51,226,246	37,103,377	36,611,630	1,324,955	2,864,037	296,766	161,790
1982	121,597,243	13,012	121,584,231	47,188,127	34,150,840	35,881,745	1,254,430	2,633,749	291,751	183,589
1981	111,028,011	26,838	111,001,173	42,824,457	31,325,322	33,030,093	1,168,691	2,247,307	238,554	166,749
1980	95,505,802	43,421	95,462,381	37,580,892	27,369,963	27,316,770	1,041,008	1,811,065	207,683	135,000
1979	79,649,846	9,609	79,640,237	30,798,693	22,264,356	23,825,487	918,157	1,517,333	188,628	127,583
1978	69,865,806	12,862	69,852,944	27,381,419	19,714,364	20,280,391	849,677	1,350,439	170,123	106,531
1977	62,629,713	19,684	62,610,029	24,687,500	18,021,548	17,629,321	776,771	1,245,155	145,680	104,054
1976	53,480,659	17,795	53,462,864	21,149,590	15,236,104	14,999,522	724,436	1,112,247	163,840	77,125
1975	46,864,685	11,229	46,853,456	18,803,156	13,486,624	12,707,490	659,332	975,799	159,160	61,895
1974	39,133,322	6,517	39,126,805	15,702,853	11,196,960	10,673,464	573,164	780,010	146,112	54,242
1973	31,668,281	5,422	31,662,859	13,194,773	9,147,188	8,073,636	491,831	620,991	91,903	42,537
1972	27,927,681	6,611	27,921,070	11,729,833	8,041,052	6,983,891	449,831	593,267	85,300	37,896
1971	24,735,122	9,963	24,725,159	10,483,526	7,071,971	6,133,964	411,534	512,772	77,862	33,530
1970	22,076,885	11,023	22,065,862	9,415,707	6,290,225	5,429,852	377,791	453,104	69,169	30,014
1969	20,144,225	4,876	20,139,349	8,532,729	5,704,764	5,044,857	350,563	417,571	62,981	25,884
1968	18,585,368	5,489	18,579,879	7,802,033	5,315,100	4,672,211	327,196	379,435	61,440	22,464
1967	17,226,235	3,515	17,222,720	7,183,908	4,935,911	4,364,759	307,272	349,323	60,609	20,938

Note: Total may not equal sum of components due to independent rounding.

† Excludes other electric revenues.

** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*

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TABLE 57

REVENUES

INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenues	Other Revenues †	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1987p	**$129,436,958**	**$6,124,194**	**$123,312,764**	**$47,961,940**	**$39,437,161**	**$32,110,715**	**$1,198,409**	**$2,321,454**	**$147,336**	**$135,749**
1986r	127,522,448	6,447,978	121,074,470	46,241,943	38,382,364	32,618,323	1,177,956	2,334,092	156,846	162,947
1985	125,547,432	6,711,160	118,836,272	44,651,261	37,241,520	33,204,216	1,159,701	2,285,783	157,728	136,064
1984	120,090,160	6,752,083	113,338,077	42,474,833	34,720,332	32,605,010	1,119,279	2,144,129	142,578	131,916
1983	109,446,384	6,581,164	102,865,220	39,067,481	31,336,661	29,275,314	1,057,872	1,899,057	126,300	102,536
1982	101,692,973	4,595,135	97,097,838	36,138,364	29,603,969	28,322,848	1,022,473	1,775,494	130,340	104,329
1981	94,266,325	5,497,327	88,768,998	32,622,129	26,370,929	26,986,678	933,861	1,641,632	120,124	93,645
1980	80,635,823	4,460,469	76,175,354	28,492,402	22,351,012	22,970,668	819,762	1,362,136	111,552	67,822
1979	68,151,992	4,274,055	63,877,937	23,613,621	18,463,690	19,801,718	716,209	1,137,987	80,002	64,710
1978	61,298,846	3,683,472	57,615,374	21,623,578	16,784,764	17,379,313	682,895	1,016,671	74,772	53,381
1977	55,141,656	3,364,784	51,776,872	19,541,802	15,404,917	15,092,313	632,154	964,452	90,263	50,971
1976	47,079,734	2,599,312	44,480,422	16,920,314	13,137,482	12,688,950	612,674	935,116	150,173	35,713
1975	41,855,398	2,285,281	39,570,117	15,434,811	11,766,583	10,785,231	558,554	841,853	157,539	25,546
1974	34,970,201	1,784,436	33,185,765	12,881,369	9,737,585	9,243,172	485,472	670,971	144,837	22,359
1973	27,525,926	1,208,947	26,316,979	10,590,178	7,807,644	6,875,953	412,921	522,826	90,753	16,704
1972	24,132,546	1,011,942	23,120,604	9,359,949	6,832,630	5,950,367	378,413	502,910	84,144	12,191
1971	21,230,373	835,581	20,394,792	8,308,330	6,016,096	5,199,601	347,972	435,949	76,701	10,143
1970	18,830,214	722,994	18,107,220	7,424,224	5,314,447	4,591,093	319,373	381,406	68,030	8,648
1969	17,163,515	647,843	16,515,672	6,722,985	4,804,558	4,274,968	296,028	347,078	61,855	8,200
1968	15,809,534	577,493	15,232,041	6,142,073	4,471,545	3,961,473	276,010	313,231	60,295	7,414
1967	14,568,786	513,147	14,055,639	5,639,111	4,125,734	3,679,635	258,324	286,898	59,358	6,579

Note: Total may not equal sum of components due to independent rounding.

† Includes revenue from sales to non-investor-owned electric utilities, from exports and other electric revenues.

** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*

p Preliminary. r Revised.

TABLE 58

REVENUES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE

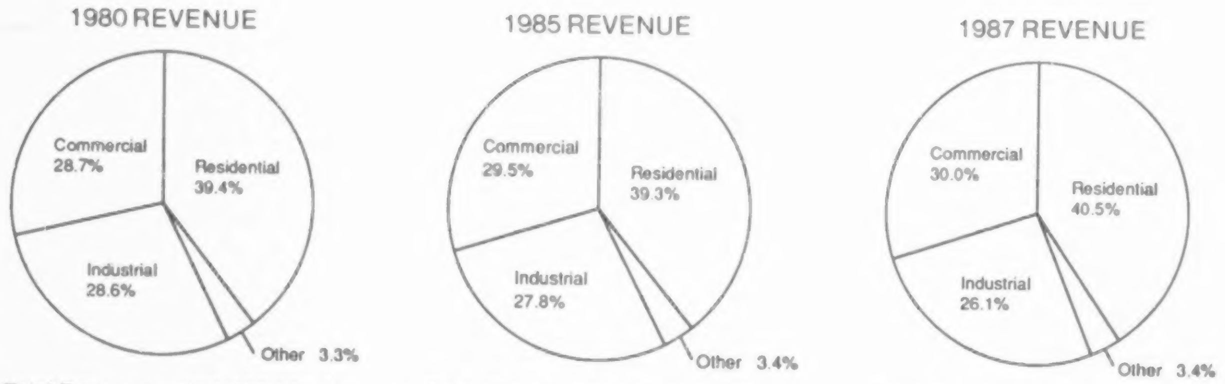
Year	Residential	Commercial	Industrial	Street & Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1987p	**40.5%**	**30.0%**	**26.1%**	**1.0%**	**2.1%**	**0.2%**	**0.1%**
1986r	40.0	29.8	26.8	1.0	2.1	0.2	0.1
1985	39.3	29.5	27.8	1.0	2.1	0.2	0.1
1984	39.3	28.8	28.5	1.0	2.1	0.2	0.1
1983	39.5	28.6	28.3	1.0	2.2	0.3	0.1
1982	38.8	28.1	29.5	1.0	2.2	0.2	0.2
1981	38.6	28.2	29.7	1.1	2.0	0.2	0.2
1980	39.4	28.7	28.6	1.1	1.9	0.2	0.1
1979	38.7	28.0	29.9	1.1	1.9	0.2	0.2
1978	39.2	28.2	29.0	1.2	1.9	0.3	0.2
1977	39.4	28.8	28.2	1.2	2.0	0.2	0.2
1976	39.6	28.5	28.0	1.4	2.1	0.3	0.1
1975	40.1	28.8	27.1	1.4	2.1	0.4	0.1
1974	40.1	28.6	27.3	1.5	2.0	0.4	0.1
1973	41.6	28.9	25.5	1.6	2.0	0.3	0.1
1972	42.0	28.8	25.0	1.6	2.1	0.3	0.2
1971	42.4	28.6	24.8	1.7	2.1	0.3	0.1
1970	42.7	28.5	24.6	1.7	2.1	0.3	0.1
1969	42.4	28.3	25.0	1.8	2.1	0.3	0.1
1968	42.0	28.6	25.2	1.8	2.0	0.3	0.1
1967	41.7	28.7	25.3	1.8	2.0	0.4	0.1

Based on revenue data in Table 56. *p Preliminary* *r Revised.*

CHART VIII-8

REVENUE

TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS



1980 REVENUE — Total Revenue = $95,462,381

1985 REVENUE — Total Revenue=$149,162,352

1987 REVENUE — Total Revenue=$155,523,219

Based on Table 58, as shown above.

TABLE 59A

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1987p—THOUSANDS OF DOLLARS

Division/State	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**$155,523,219**	**$62,951,554**	**$46,604,260**	**$40,725,354**	**$1,508,199**	**$3,245,337**	**$301,048**	**$187,467**
Maine	698,467	302,508	170,698	209,633	9,637	5,873	—	119
New Hampshire	669,160	303,891	154,555	199,459	6,928	4,326	—	—
Vermont	361,375	154,620	114,886	85,592	2,896	3,361	—	20
Massachusetts	3,374,447	1,271,168	1,319,876	686,111	53,396	43,897	—	—
Rhode Island	484,504	193,297	171,082	105,135	6,886	8,104	—	—
Connecticut	2,126,888	884,920	778,281	422,496	31,069	2,114	7,378	631
New England	**7,714,841**	**3,110,405**	**2,709,376**	**1,708,425**	**110,812**	**67,675**	**7,378**	**770**
New York	10,367,956	3,720,747	4,356,917	1,437,151	139,769	554,791	156,523	2,057
New Jersey	5,036,313	1,909,210	1,993,109	1,057,405	74,280	—	414	1,896
Pennsylvania	7,818,968	3,161,731	1,986,676	2,525,312	84,050	8,778	47,218	5,204
Middle Atlantic	**23,223,238**	**8,791,688**	**8,336,702**	**5,019,869**	**298,098**	**563,569**	**204,156**	**9,157**
Ohio	7,511,900	2,828,752	1,933,335	2,496,141	59,479	189,423	3,652	1,118
Indiana	3,767,631	1,525,186	907,928	1,284,178	33,943	12,714	1,137	2,5[illegible]
Illinois	8,132,007	3,243,989	2,260,019	2,121,016	49,472	429,251	28,205	[illegible]
Michigan	5,096,281	1,755,458	1,412,599	1,826,102	58,406	42,064	—	1,65[illegible]
Wisconsin	2,504,868	1,025,032	708,545	724,223	29,355	13,077	—	4,635
East North Central	**27,012,688**	**10,378,417**	**7,222,427**	**8,451,661**	**230,654**	**686,529**	**32,994**	**10,008**
Minnesota	2,220,569	913,291	408,052	857,709	23,271	18,060	—	186
Iowa	1,736,713	782,750	414,993	490,460	18,935	29,520	—	54
Missouri	3,137,583	1,463,995	1,064,748	550,974	28,648	28,307	285	626
North Dakota	372,123	171,436	92,967	90,470	6,470	10,660	—	120
South Dakota	341,012	182,414	101,299	46,517	4,932	5,848	—	3
Nebraska	849,200	375,505	287,746	153,177	12,687	19,649	—	435
Kansas	1,671,226	697,969	579,980	363,900	17,123	12,198	—	55
West North Central	**10,328,425**	**4,587,358**	**2,949,785**	**2,553,208**	**112,066**	**124,243**	**285**	**1,480**
Delaware	453,637	191,723	130,090	127,487	3,134	1,099	—	104
Maryland	2,682,604	1,179,307	687,731	766,334	37,133	226	10,299	1,574
District of Columbia	578,893	92,114	317,483	151,228	4,046	—	14,022	—
Virginia	3,837,854	1,783,059	1,047,924	603,395	37,125	366,351	—	—
West Virginia	1,056,516	439,545	259,670	349,702	6,433	1,168	—	—
North Carolina	5,018,950	2,296,912	1,282,535	1,340,511	29,531	68,312	—	1,150
South Carolina	2,894,415	1,209,476	627,848	1,018,864	10,567	27,149	—	511
Georgia	4,242,071	1,829,262	1,255,785	1,100,824	34,496	15,583	6,121	—
Florida	8,385,827	4,552,952	2,661,015	920,736	66,564	172,159	5,255	7,145
South Atlantic	**29,150,767**	**13,574,348**	**8,270,081**	**6,379,081**	**229,028**	**652,048**	**35,697**	**10,484**
Kentucky	2,637,072	922,493	462,843	1,026,048	13,572	209,120	—	2,995
Tennessee	3,942,995	1,596,753	501,592	1,812,153	26,272	2,788	—	3,437
Alabama	3,051,553	1,251,641	646,759	1,129,501	20,607	1,171	—	1,876
Mississippi	1,662,864	731,846	436,440	460,739	13,885	19,780	—	173
East South Central	**11,294,485**	**4,502,734**	**2,047,634**	**4,428,442**	**74,336**	**232,859**	**—**	**8,480**
Arkansas	1,566,483	753,733	381,633	402,532	9,118	19,467	—	—
Louisiana	3,413,647	1,408,587	806,621	985,745	28,165	96,730	—	87,800
Oklahoma	1,982,584	936,377	567,230	378,060	15,203	85,714	—	—
Texas	11,596,926	4,843,061	3,233,608	3,115,830	88,747	305,193	—	10,487
West South Central	**18,559,640**	**7,941,757**	**4,989,092**	**4,882,168**	**141,233**	**507,103**	**—**	**98,287**
Montana	466,561	164,347	123,889	168,645	5,976	2,972	—	732
Idaho	592,594	238,930	187,579	161,881	4,058	147	—	—
Wyoming	469,008	102,278	117,053	243,214	3,412	2,303	—	748
Colorado	1,599,790	629,169	679,461	258,803	21,599	10,759	—	—
New Mexico	913,853	299,997	342,080	222,443	7,417	38,149	—	3,767
Arizona	2,665,105	1,183,494	942,587	458,771	28,282	37,404	1,647	12,921
Utah	900,024	316,526	304,183	238,247	6,085	34,933	—	49
Nevada	663,223	262,886	196,257	189,075	4,975	10,026	—	4
Mountain	**8,270,159**	**3,197,627**	**2,893,089**	**1,941,078**	**81,803**	**136,692**	**1,647**	**18,222**
Washington	2,509,689	,049,361	842,218	762,372	19,342	34,974	628	793
Oregon	1,612,918	635,481	527,470	430,907	14,845	2,740	—	1,474
California	14,901,406	4,840,138	5,683,972	3,918,799	180,859	231,083	18,264	28,290
Pacific	**19,024,013**	**6,524,981**	**6,853,660**	**5,112,079**	**215,046**	**268,797**	**18,892**	**30,557**
Alaska	342,153	146,963	155,117	24,124	10,105	5,822	—	23
Hawaii	602,811	195,277	177,298	225,220	5,016	—	—	—
Alaska & Hawaii	**944,964**	**342,239**	**332,415**	**249,344**	**15,121**	**5,822**	**—**	**23**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.

TABLE 59B

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1986r—THOUSANDS OF DOLLARS

Division/State	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**$152,467,123**	**$60,910,603**	**$45,410,286**	**$40,906,054**	**$1,498,431**	**$3,214,164**	**$311,971**	**$215,614**
Maine	692,024	292,911	177,428	202,579	11,127	7,902	—	77
New Hampshire	575,030	263,338	128,101	172,774	6,797	4,020	—	—
Vermont	344,428	150,063	70,477	108,161	2,851	12,854	—	21
Massachusetts	3,092,798	1,154,998	1,205,358	642,432	51,502	38,507	—	—
Rhode Island	450,291	179,250	157,279	98,943	6,497	8,322	—	—
Connecticut	2,053,668	843,980	740,347	425,705	31,583	1,897	9,552	604
New England	**7,208,239**	**2,884,540**	**2,478,991**	**1,650,593**	**110,358**	**73,503**	**9,552**	**703**
New York	10,172,444	3,566,535	4,319,650	1,453,480	144,691	529,012	157,004	2,072
New Jersey	5,248,979	1,927,807	2,046,457	1,200,261	72,148	—	378	1,927
Pennsylvania	7,631,799	3,034,899	1,925,766	2,516,542	88,123	9,662	52,109	4,700
Middle Atlantic	**23,053,221**	**8,529,240**	**8,291,872**	**5,170,283**	**304,962**	**538,674**	**209,491**	**8,699**
Ohio	7,279,626	2,703,438	1,869,986	2,457,045	59,522	184,843	3,634	1,158
Indiana	3,668,854	1,473,924	730,741	1,414,196	33,564	12,500	1,281	2,649
Illinois	7,734,526	2,923,864	2,226,055	2,087,999	48,921	419,265	28,342	79
Michigan	5,171,189	1,734,130	1,448,300	1,882,405	58,774	44,187	—	3,393
Wisconsin	2,471,744	1,023,248	696,932	703,255	30,053	13,610	—	4,647
East North Central	**26,325,939**	**9,858,604**	**6,972,014**	**8,544,900**	**230,833**	**674,406**	**33,257**	**11,926**
Minnesota	2,148,712	905,139	396,356	806,145	23,275	17,589	—	208
Iowa	1,722,528	770,135	412,797	489,878	19,426	30,236	—	55
Missouri	2,974,934	1,390,566	985,272	540,580	28,660	28,923	316	617
North Dakota	381,513	177,591	96,726	90,301	6,363	10,412	—	120
South Dakota	338,493	182,328	99,710	45,719	4,920	5,814	—	3
Nebraska	841,089	367,664	281,263	159,176	12,503	19,635	—	849
Kansas	1,670,706	685,015	583,508	373,642	17,224	11,177	—	139
West North Central	**10,077,977**	**4,478,438**	**2,855,632**	**2,505,442**	**112,372**	**123,786**	**316**	**1,992**
Delaware	443,227	179,629	123,813	135,611	2,959	1,093	—	122
Maryland	2,652,809	1,135,872	694,051	770,976	38,602	234	11,356	1,718
District of Columbia	587,026	90,896	320,617	156,383	4,371	—	14,758	—
Virginia	3,643,659	1,680,343	984,659	599,669	34,740	343,626	621	—
West Virginia	1,038,400	425,157	253,718	351,528	6,275	1,710	—	12
North Carolina	4,745,911	2,136,650	1,213,956	1,293,373	29,233	71,567	—	1,131
South Carolina	2,739,947	1,151,256	594,798	955,614	10,592	27,201	—	486
Georgia	3,956,360	1,746,908	1,067,987	1,087,974	32,050	15,228	6,213	—
Florida	8,440,561	4,595,056	2,635,690	951,954	65,276	180,239	4,935	7,411
South Atlantic	**28,247,899**	**13,141,767**	**7,889,290**	**6,303,082**	**224,098**	**640,898**	**37,884**	**10,879**
Kentucky	2,551,066	892,984	454,712	955,399	13,495	231,756	—	2,719
Tennessee	3,627,279	1,423,552	431,995	1,738,757	25,417	2,760	—	4,798
Alabama	2,932,487	1,194,509	618,239	1,096,398	20,268	1,134	—	1,940
Mississippi	1,648,034	721,143	435,503	456,636	13,767	20,776	—	209
East South Central	**10,758,866**	**4,232,188**	**1,940,449**	**4,247,190**	**72,947**	**256,426**	**—**	**9,666**
Arkansas	1,544,783	731,366	376,577	408,302	9,169	19,369	—	—
Louisiana	3,491,299	1,451,057	817,201	1,011,501	27,108	94,022	—	90,409
Oklahoma	2,130,193	977,095	609,977	434,046	15,483	93,591	—	—
Texas	12,157,023	4,963,532	3,384,054	3,404,334	89,015	304,363	—	11,725
West South Central	**19,323,298**	**8,123,052**	**5,187,809**	**5,258,183**	**140,775**	**511,346**	**—**	**102,134**
Montana	448,047	165,387	118,836	154,425	5,949	2,845	—	605
Idaho	586,406	241,352	182,297	158,589	4,018	150	—	—
Wyoming	453,451	102,743	115,876	228,699	3,341	2,557	—	235
Colorado	1,596,171	623,124	679,993	261,356	21,721	9,976	—	*
New Mexico	886,450	284,106	328,850	226,360	6,935	35,972	—	4,227
Arizona	2,495,827	1,084,302	884,677	453,407	28,614	28,939	1,662	14,226
Utah	891,923	317,221	298,290	235,745	6,103	34,506	—	58
Nevada	673,703	269,609	199,987	187,531	5,373	11,200	—	3
Mountain	**8,031,978**	**3,087,845**	**2,808,807**	**1,906,113**	**82,052**	**126,144**	**1,662**	**19,355**
Washington	2,387,148	1,052,298	606,520	675,114	18,914	33,253	544	504
Oregon	1,546,777	623,220	499,556	406,066	14,474	2,654	—	808
California	14,606,984	4,572,390	5,563,923	4,003,986	171,479	227,009	19,266	48,930
Pacific	**18,540,908**	**6,247,908**	**6,669,999**	**5,085,167**	**204,867**	**262,915**	**19,810**	**50,242**
Alaska	336,343	145,068	152,414	22,444	10,331	6,068	—	19
Hawaii	562,455	181,953	163,010	212,657	4,834	—	—	—
Alaska & Hawaii	**898,798**	**327,021**	**315,424**	**235,101**	**15,166**	**6,068**	**—**	**19**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
**Less than five hundred dollars.*

TABLE 60A

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1987p—THOUSANDS OF DOLLARS

Division/State	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
Total United States	**$123,312,764**	**$47,961,940**	**$39,437,161**	**$32,110,715**	**$1,198,409**	**$2,321,454**	**$147,336**	**$135,749**
Maine	675,264	290,100	166,874	203,508	9,339	5,442	—	—
New Hampshire	617,627	271,932	139,198	195,667	6,536	4,293	—	—
Vermont	289,889	121,652	105,541	58,311	2,257	2,128	—	—
Massachusetts	2,933,901	1,109,952	1,221,550	528,800	49,291	24,308	—	—
Rhode Island	481,659	191,641	170,622	104,427	6,866	8,102	—	—
Connecticut	2,022,336	853,326	750,716	380,970	29,946	—	7,378	—
New England	**7,020,675**	**2,838,603**	**2,554,500**	**1,471,684**	**104,236**	**44,273**	**7,378**	**—**
New York	9,618,181	3,670,246	4,339,522	1,295,435	86,374	217,924	6,623	2,057
New Jersey	4,965,171	1,875,408	1,978,785	1,035,025	73,642	—	414	1,896
Pennsylvania	7,611,220	3,007,603	1,947,532	2,512,632	83,128	7,903	47,218	5,204
Middle Atlantic	**22,194,572**	**8,553,257**	**8,265,839**	**4,843,092**	**243,143**	**225,827**	**54,256**	**9,157**
Ohio	6,952,951	2,514,324	1,823,324	2,370,010	57,467	183,176	3,652	998
Indiana	3,146,916	1,139,295	818,160	1,148,260	28,944	8,575	1,137	2,546
Illinois	7,631,797	2,944,929	2,136,486	2,057,237	47,790	417,094	28,205	56
Michigan	4,646,274	1,579,868	1,268,591	1,709,038	49,903	37,222	—	1,653
Wisconsin	2,128,900	828,209	642,695	619,985	25,438	10,685	—	1,889
East North Central	**24,506,838**	**9,006,624**	**6,689,256**	**7,904,529**	**209,543**	**656,751**	**32,994**	**7,141**
Minnesota	1,491,903	458,076	254,906	748,083	16,900	13,752	—	186
Iowa	1,294,713	532,414	347,806	376,687	17,469	20,282	—	54
Missouri	2,417,366	1,015,657	909,746	451,129	24,872	15,879	—	84
North Dakota	205,361	90,376	50,672	55,938	3,328	4,927	—	120
South Dakota	192,873	82,889	69,886	35,668	2,641	1,787	—	2
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,178,191	482,312	404,982	274,805	14,677	1,360	—	55
West North Central	**6,780,407**	**2,661,725**	**2,037,997**	**1,942,309**	**79,888**	**57,987**	**—**	**501**
Delaware	356,128	143,248	110,961	99,001	2,814	—	—	104
Maryland	2,529,317	1,080,839	650,882	753,497	32,227	—	10,299	1,574
District of Columbia	578,893	92,114	317,483	151,228	4,046	—	14,022	—
Virginia	3,387,450	1,509,918	959,334	527,421	34,172	356,605	—	—
West Virginia	1,051,032	436,062	258,362	349,097	6,343	1,168	—	—
North Carolina	3,832,263	1,573,127	1,011,433	1,172,743	22,431	52,182	—	348
South Carolina	2,057,535	749,128	489,396	789,075	8,169	21,256	—	511
Georgia	2,939,044	985,939	976,726	940,553	24,933	4,773	6,121	—
Florida	6,625,589	3,597,233	2,238,256	574,209	51,026	152,464	5,255	7,145
South Atlantic	**23,357,251**	**10,167,607**	**7,012,833**	**5,356,823**	**186,161**	**588,448**	**35,697**	**9,682**
Kentucky	1,390,636	493,794	335,999	342,075	10,149	208,582	—	38
Tennessee	62,346	26,262	13,560	20,805	392	1,326	—	—
Alabama	1,993,311	759,957	501,088	721,298	10,756	—	—	211
Mississippi	892,019	339,205	274,087	251,002	9,336	18,389	—	—
East South Central	**4,338,311**	**1,619,217**	**1,124,734**	**1,335,181**	**30,633**	**228,296**	**—**	**249**
Arkansas	1,091,420	462,971	276,122	327,361	7,849	17,117	—	—
Louisiana	2,869,923	1,046,849	701,878	913,142	25,639	94,616	—	87,800
Oklahoma	1,453,031	625,937	430,162	302,998	13,216	88,717	—	—
Texas	9,328,616	3,685,216	2,626,905	2,733,702	72,368	209,653	—	772
West South Central	**14,742,990**	**5,820,974**	**4,035,067**	**4,277,203**	**119,072**	**402,103**	**—**	**88,572**
Montana	310,730	109,162	92,390	100,824	5,081	2,569	—	704
Idaho	514,173	198,611	162,812	149,595	3,056	99	—	—
Wyoming	314,594	60,503	56,983	193,693	1,955	712	—	748
Colorado	1,041,587	382,017	489,223	147,793	16,749	5,804	—	—
New Mexico	657,110	217,697	247,287	150,187	6,310	32,990	—	2,639
Arizona	1,586,691	673,828	585,939	298,288	12,789	11,707	—	4,141
Utah	724,349	256,093	224,663	206,749	5,934	30,881	—	29
Nevada	615,820	251,216	183,727	166,207	4,874	9,796	—	—
Mountain	**5,765,053**	**2,149,128**	**2,043,023**	**1,413,335**	**56,748**	**94,558**	**—**	**8,261**
Washington	1,040,833	536,023	359,057	135,406	10,140	1	—	207
Oregon	1,265,617	503,727	450,953	295,543	13,849	329	—	1,216
California	11,671,996	3,898,614	4,679,687	2,904,070	139,833	22,018	17,012	10,763
Pacific	**13,978,446**	**4,938,363**	**5,489,696**	**3,335,018**	**163,822**	**22,348**	**17,012**	**12,186**
Alaska	25,410	11,163	6,917	6,320	147	863	—	—
Hawaii	602,811	195,277	177,298	225,220	5,016	—	—	—
Alaska & Hawaii	**628,220**	**206,440**	**184,215**	**231,539**	**5,163**	**863**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.

TABLE 60B

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1986r—THOUSANDS OF DOLLARS

Division/State	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$121,074,470**	**$46,241,943**	**$38,382,364**	**$32,618,323**	**$1,177,956**	**$2,334,092**	**$156,846**	**$162,947**
Maine	673,027	282,125	174,305	198,274	10,770	7,554	—	—
New Hampshire	530,360	235,184	114,988	169,779	6,427	3,983	—	—
Vermont	279,043	118,462	61,265	84,939	2,271	12,105	—	—
Massachusetts	2,695,004	1,008,651	1,115,118	502,733	47,198	21,305	—	—
Rhode Island	447,831	177,770	156,909	98,347	6,486	8,319	—	—
Connecticut	1,955,978	814,604	715,565	386,265	29,993	—	9,552	—
New England	**6,581,244**	**2,636,796**	**2,338,149**	**1,440,336**	**103,144**	**53,267**	**9,552**	**—**
New York	9,432,774	3,516,559	4,302,100	1,305,367	86,388	214,642	5,648	2,072
New Jersey	5,180,728	1,895,363	2,032,808	1,178,741	71,511	—	378	1,927
Pennsylvania	7,434,570	2,889,093	1,888,972	2,503,680	87,226	8,790	52,109	4,700
Middle Atlantic	**22,048,072**	**8,301,015**	**8,223,880**	**4,987,788**	**245,124**	**223,431**	**58,135**	**8,699**
Ohio	6,732,292	2,396,708	1,761,894	2,332,960	57,499	178,559	3,634	1,038
Indiana	3,053,765	1,089,518	641,271	1,282,137	28,528	8,381	1,281	2,649
Illinois	7,222,776	2,615,787	2,100,905	2,023,357	47,243	407,061	28,342	79
Michigan	4,684,100	1,563,333	1,258,130	1,769,191	50,561	39,491	—	3,393
Wisconsin	2,097,491	827,133	631,408	599,686	26,120	11,258	—	1,887
East North Central	**23,790,423**	**8,492,479**	**6,393,609**	**8,007,332**	**209,950**	**644,751**	**33,257**	**9,046**
Minnesota	1,452,791	454,806	249,043	718,323	17,043	13,368	—	208
Iowa	1,277,034	516,023	346,346	375,686	17,947	20,977	—	55
Missouri	2,250,352	934,836	843,982	431,117	23,982	16,357	—	77
North Dakota	209,708	94,125	54,017	53,330	3,298	4,818	—	120
South Dakota	192,820	83,604	69,763	35,017	2,644	1,790	—	2
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,165,766	471,226	400,046	278,078	14,771	1,506	—	139
West North Central	**6,548,470**	**2,554,620**	**1,963,196**	**1,891,551**	**79,686**	**58,815**	**—**	**601**
Delaware	346,215	131,444	105,003	106,991	2,656	—	—	122
Maryland	2,508,528	1,045,509	658,072	758,440	33,433	—	11,356	1,718
District of Columbia	587,026	90,896	320,617	156,383	4,371	—	14,758	—
Virginia	3,225,787	1,431,841	899,479	528,128	31,807	333,911	621	—
West Virginia	1,033,118	421,866	252,421	350,923	6,186	1,710	—	12
North Carolina	3,608,789	1,452,102	951,336	1,126,892	22,317	55,811	—	331
South Carolina	1,929,537	706,375	460,825	731,628	8,321	21,903	—	486
Georgia	2,829,208	954,863	913,846	926,223	23,361	4,700	6,213	—
Florida	6,577,806	3,574,809	2,179,320	601,169	50,367	159,794	4,935	7,411
South Atlantic	**22,646,013**	**9,809,706**	**6,740,920**	**5,286,777**	**182,819**	**577,829**	**37,884**	**10,079**
Kentucky	1,416,558	491,727	335,247	348,461	10,152	230,936	—	35
Tennessee	60,373	25,440	12,956	20,289	386	1,302	—	—
Alabama	1,936,746	738,864	481,676	705,396	10,567	—	—	244
Mississippi	915,359	348,134	278,762	259,634	9,391	19,439	—	—
East South Central	**4,329,038**	**1,604,165**	**1,108,640**	**1,333,780**	**30,495**	**251,677**	**—**	**279**
Arkansas	1,079,949	449,832	271,180	334,133	7,865	16,940	—	—
Louisiana	2,880,579	1,041,768	696,458	935,547	24,565	91,831	—	90,409
Oklahoma	1,578,412	659,590	461,656	355,047	13,499	88,620	—	—
Texas	9,637,664	3,688,213	2,680,550	2,987,859	72,221	207,853	—	968
West South Central	**15,176,603**	**5,839,403**	**4,109,844**	**4,612,586**	**118,149**	**405,243**	**—**	**91,377**
Montana	300,758	111,171	87,217	94,282	5,074	2,455	—	559
Idaho	507,231	201,145	157,594	145,372	3,017	102	—	—
Wyoming	293,452	59,993	56,357	174,373	1,902	592	—	235
Colorado	1,052,490	384,847	496,302	148,095	16,886	6,361	—	—
New Mexico	625,957	204,132	230,732	151,458	5,837	30,668	—	3,129
Arizona	1,500,899	622,061	554,701	294,272	13,187	11,175	—	5,503
Utah	719,128	257,260	218,080	207,322	5,960	30,474	—	32
Nevada	633,233	258,389	187,688	170,908	5,273	10,975	—	—
Mountain	**5,633,148**	**2,098,998**	**1,988,672**	**1,386,081**	**57,137**	**92,802**	**—**	**9,458**
Washington	1,003,056	529,889	334,320	128,773	10,074	1	—	—
Oregon	1,231,186	494,047	425,169	297,428	13,678	314	—	550
California	11,503,612	3,689,272	4,585,898	3,029,713	122,730	25,122	18,018	32,858
Pacific	**13,737,854**	**4,713,208**	**5,345,387**	**3,455,914**	**146,481**	**25,436**	**18,018**	**33,409**
Alaska	21,153	9,600	7,057	3,521	135	839	—	—
Hawaii	562,455	181,953	163,010	212,657	4,834	—	—	—
Alaska & Hawaii	**583,607**	**191,553**	**170,067**	**216,179**	**4,970**	**839**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
r Revised.

TABLE 61

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1982-1987—THOUSANDS OF DOLLARS

Year—Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR—1987p								
First Quarter	$ 36,869,390	$15,514,465	$10,692,769	$ 9,386,576	$ 374,249	$ 774,711	$ 78,453	$ 48,166
Second Quarter	36,740,623	14,083,278	11,246,291	10,104,521	386,468	795,983	72,080	52,002
Third Quarter	45,005,854	19,116,607	13,429,710	11,077,300	372,372	882,163	76,740	50,961
Fourth Quarter	36,907,353	14,237,204	11,235,490	10,156,955	375,110	792,481	73,775	36,338
Total	**$155,523,219**	**$62,951,554**	**$46,604,260**	**$40,725,354**	**$1,508,199**	**$3,245,337**	**$301,048**	**$187,467**
YEAR—1986r								
First Quarter	$ 37,653,132	$15,555,169	$10,724,906	$10,047,285	$ 384,848	$ 801,638	$ 83,113	$ 56,171
Second Quarter	35,577,168	13,238,115	10,967,967	10,112,652	363,391	772,993	74,248	47,802
Third Quarter	43,036,318	17,967,869	12,873,376	10,821,908	379,282	856,022	77,953	59,908
Fourth Quarter	36,200,506	14,149,450	10,844,037	9,924,209	370,909	783,510	76,657	51,733
Total	**$152,467,123**	**$60,910,603**	**$45,410,286**	**$40,906,054**	**$1,498,431**	**$3,214,164**	**$311,971**	**$215,614**
YEAR—1985								
First Quarter	$ 36,754,335	$15,166,967	$10,267,363	$10,046,679	$ 374,536	$ 768,455	$ 79,540	$ 50,797
Second Quarter	35,007,556	12,809,647	10,584,167	10,360,169	360,647	774,643	72,559	45,725
Third Quarter	41,420,795	16,852,682	12,406,550	10,822,584	370,430	836,349	81,215	50,986
Fourth Quarter	35,979,667	13,762,456	10,802,475	10,138,415	370,479	784,027	79,852	41,963
Total	**$149,162,352**	**$58,591,751**	**$44,060,554**	**$41,367,847**	**$1,476,092**	**$3,163,473**	**$313,165**	**$189,470**
YEAR—1984								
First Quarter	$ 34,722,044	$14,377,830	$ 9,511,784	$ 9,633,803	$ 343,630	$ 736,404	$ 76,587	$ 42,006
Second Quarter	33,455,487	12,356,594	9,731,940	10,183,560	334,520	731,098	71,322	46,453
Third Quarter	40,284,362	16,304,756	11,860,912	10,819,381	350,557	813,464	77,858	57,434
Fourth Quarter	34,630,610	13,076,961	10,149,085	10,159,044	347,224	763,657	76,958	57,681
Total	**$143,092,504**	**$56,116,141**	**$41,253,720**	**$40,795,789**	**$1,375,931**	**$3,044,623**	**$302,725**	**$203,574**
YEAR—1983								
First Quarter	$ 30,583,012	$12,412,872	$ 8,510,712	$ 8,526,308	$ 334,860	$ 686,136	$ 77,160	$ 34,963
Second Quarter	29,337,252	10,887,230	8,574,493	8,778,599	316,158	673,477	67,335	39,960
Third Quarter	37,733,929	15,847,346	10,820,922	9,848,254	335,140	761,923	73,698	46,645
Fourth Quarter	31,934,609	12,078,798	9,197,249	9,458,469	338,797	742,501	78,573	40,221
Total	**$129,588,801**	**$51,226,246**	**$37,103,377**	**$36,611,630**	**$1,324,955**	**$2,864,037**	**$296,766**	**$161,790**
YEAR—1982								
First Quarter	$ 30,463,093	$12,200,151	$ 8,280,893	$ 8,899,615	$ 318,995	$ 642,501	$ 72,685	$ 48,253
Second Quarter	28,541,959	10,501,618	8,055,672	8,907,001	302,569	664,163	71,559	39,377
Third Quarter	33,376,269	13,260,202	9,542,893	9,441,965	287,525	714,244	80,494	48,946
Fourth Quarter	29,202,910	11,226,156	8,271,382	8,633,164	345,341	612,841	67,013	47,013
Total	**$121,584,231**	**$47,188,127**	**$34,150,840**	**$35,881,745**	**$1,254,430**	**$2,633,749**	**$291,751**	**$183,589**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 62

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

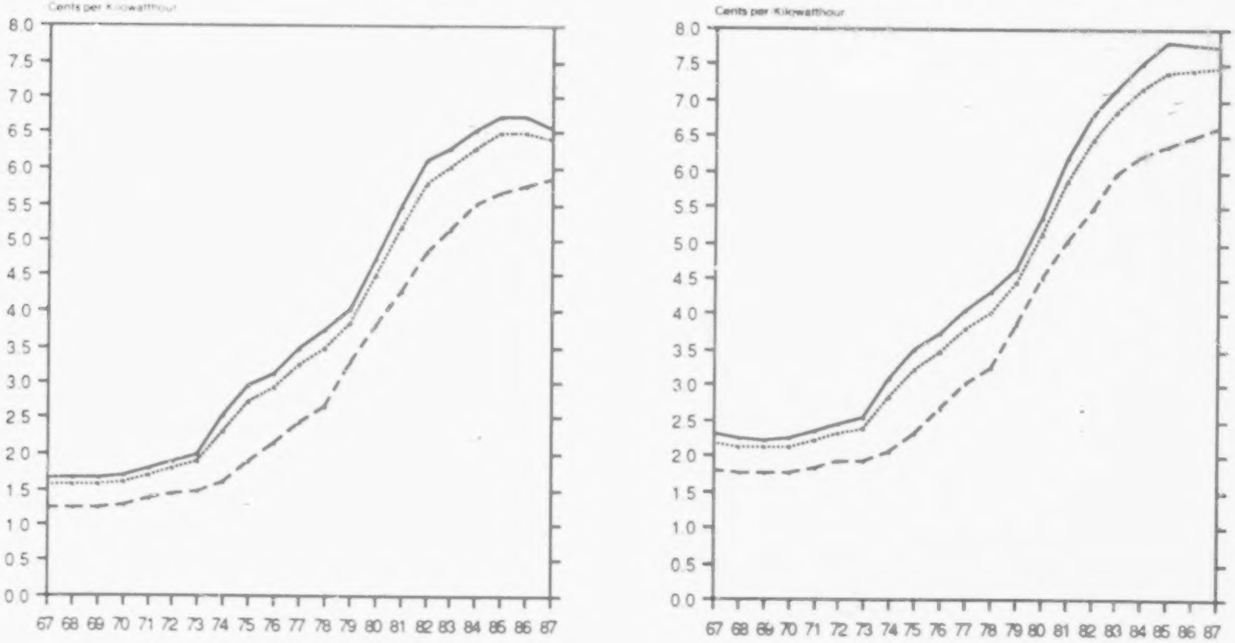
BY QUARTER AND CLASS OF SERVICE
1982-1987 — THOUSANDS OF DOLLARS

Year – Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
YEAR – 1987p								
First Quarter	$ 29,191,210	$11,800,924	$ 9,036,665	$ 7,431,622	$ 297,823	$ 549,095	$ 38,253	$ 36,828
Second Quarter	29,218,540	10,756,625	9,518,679	7,990,442	309,363	568,276	36,243	38,911
Third Quarter	35,718,844	14,535,694	11,393,379	8,780,915	293,623	641,326	37,062	36,844
Fourth Quarter	29,184,170	10,868,696	9,488,439	7,907,735	297,600	562,757	35,778	23,166
Total	**$123,312,764**	**$47,961,940**	**$39,437,161**	**$32,110,715**	**$1,198,409**	**$2,321,454**	**$147,336**	**$135,749**
YEAR – 1986r								
First Quarter	$ 29,895,007	$11,835,967	$ 9,061,657	$ 8,028,150	$ 304,671	$ 578,054	$ 42,513	$ 43,995
Second Quarter	28,374,923	10,096,138	9,292,294	8,064,825	285,522	563,399	37,802	34,943
Third Quarter	34,075,844	13,538,755	10,889,298	8,642,478	298,067	624,166	38,258	44,822
Fourth Quarter	28,728,696	10,771,084	9,139,116	7,882,870	289,695	568,473	38,272	39,186
Total	**$121,074,470**	**$46,241,943**	**$38,382,364**	**$32,618,323**	**$1,177,956**	**$2,334,092**	**$156,846**	**$162,947**
YEAR – 1985								
First Quarter	$ 29,132,718	$11,519,273	$ 8,657,938	$ 8,031,567	$ 296,484	$ 548,544	$ 40,254	$ 38,660
Second Quarter	28,019,118	9,807,508	8,969,446	8,322,627	282,255	568,360	35,839	33,082
Third Quarter	33,012,579	12,802,412	10,512,910	8,721,651	292,695	605,980	41,028	35,903
Fourth Quarter	28,671,857	10,522,068	9,101,226	8,128,371	288,267	562,899	40,608	28,418
Total	**$118,836,272**	**$44,651,261**	**$37,241,520**	**$33,204,216**	**$1,159,701**	**$2,285,783**	**$157,728**	**$136,064**
YEAR – 1984								
First Quarter	$ 27,321,801	$10,829,722	$ 7,998,735	$ 7,630,116	$ 280,121	$ 519,634	$ 35,810	$ 27,663
Second Quarter	26,600,968	9,408,608	8,205,744	8,135,552	270,379	518,066	33,850	28,768
Third Quarter	31,898,162	12,288,788	9,991,921	8,685,978	285,971	574,043	36,426	35,036
Fourth Quarter	27,517,146	9,947,714	8,523,932	8,153,364	282,807	532,386	36,493	40,449
Total	**$113,338,077**	**$42,474,833**	**$34,720,332**	**$32,605,010**	**$1,119,279**	**$2,144,129**	**$142,578**	**$131,916**
YEAR – 1983								
First Quarter	$ 24,197,183	$ 9,451,950	$ 7,191,709	$ 6,779,800	$ 269,635	$ 447,831	$ 32,830	$ 23,429
Second Quarter	23,452,710	8,344,018	7,251,119	7,105,060	251,833	446,320	28,241	26,119
Third Quarter	29,852,953	12,040,777	9,126,140	7,853,722	267,184	507,602	30,003	27,525
Fourth Quarter	25,362,375	9,230,736	7,767,693	7,536,732	269,220	497,304	35,226	25,464
Total	**$102,865,220**	**$39,067,481**	**$31,336,661**	**$29,275,314**	**$1,057,872**	**$1,899,057**	**$126,300**	**$102,536**
YEAR – 1982								
First Quarter	$ 22,833,591	$ 8,743,287	$ 6,794,059	$ 6,559,221	$ 260,612	$ 418,693	$ 33,880	$ 23,839
Second Quarter	22,158,911	7,718,423	6,850,184	6,873,898	243,406	417,280	29,144	26,576
Third Quarter	28,149,536	11,138,016	8,621,530	7,598,203	258,243	474,575	30,963	28,006
Fourth Quarter	23,955,800	8,538,659	7,338,195	7,291,526	260,211	464,947	36,353	25,909
Total	**$ 97,097,838**	**$36,138,384**	**$29,603,969**	**$28,322,848**	**$1,022,473**	**$1,775,494**	**$130,340**	**$104,329**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. *r Revised.*

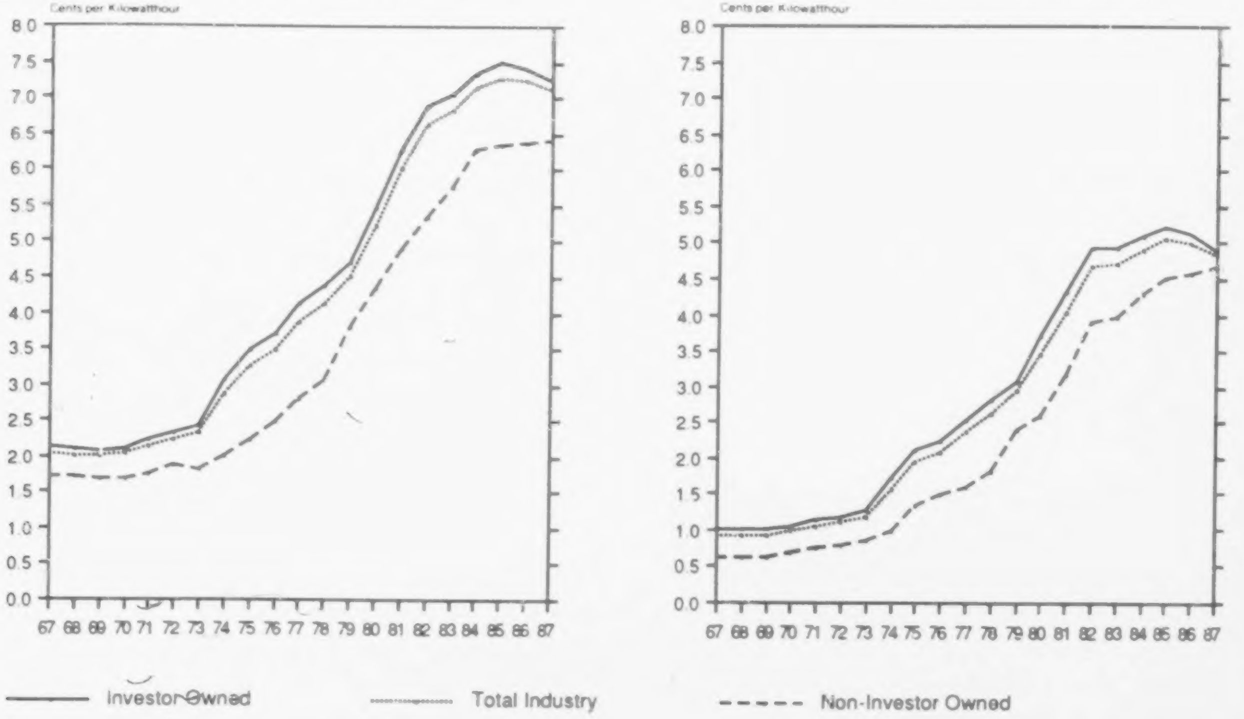
CHART VIII-C

AVERAGE REVENUES PER KWH SOLD



TOTAL ULTIMATE CUSTOMERS

RESIDENTIAL CUSTOMERS



COMMERCIAL CUSTOMERS

INDUSTRIAL CUSTOMERS

Based on sales data in Tables 38 and 39, page 44, and revenue data in Tables 56 and 57, page 65.

TABLE 63

AVERAGE REVENUES PER KILOWATTHOUR SOLD TOTAL ELECTRIC UTILITY INDUSTRY

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1987p	**7.45¢**	**7.10¢**	**4.83¢**	**10.37¢**	**5.17¢**	**6.17¢**	**6.40¢**
1986r	7.43	7.22	4.99	9.96	5.19	6.65	6.47
1985	7.39	7.27	5.04	10.08	5.09	6.66	6.47
1984	7.17	7.14	4.88	9.69	5.08	6.75	6.27
1983	6.83	6.80	4.68	9.50	5.00	6.90	6.00
1982	6.44	6.61	4.66	8.81	4.72	6.80	5.79
1981	5.86	6.00	4.03	7.96	4.18	5.67	5.16
1980	5.12	5.22	3.44	7.02	3.75	4.86	4.49
1979	4.43	4.50	2.91	6.21	3.06	4.43	3.82
1978	4.03	4.10	2.59	5.74	2.73	3.92	3.46
1977	3.78	3.84	2.33	5.39	2.69	3.46	3.21
1976	3.45	3.46	2.07	5.03	2.44	3.78	2.89
1975	3.21	3.23	1.92	4.74	2.24	3.72	2.70
1974	2.83	2.85	1.55	4.31	1.92	3.43	2.30
1973	2.38	2.30	1.17	3.83	1.47	2.20	1.86
1972	2.29	2.22	1.09	3.69	1.37	1.92	1.77
1971	2.19	2.12	1.03	3.53	1.29	1.72	1.69
1970	2.10	2.01	0.95	3.38	1.20	1.49	1.59
1969	2.09	1.99	0.91	3.25	1.16	1.39	1.54
1968	2.12	2.00	0.90	3.18	1.18	1.35	1.55
1967	2.17	2.04	0.90	3.12	1.19	1.33	1.56

Based on sales data in Table 38 and revenue data in Table 56. p Preliminary. r Revised.

TABLE 64

AVERAGE REVENUES PER KILOWATTHOUR SOLD INVESTOR-OWNED ELECTRIC UTILITIES

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1987p	**7.75¢**	**7.24¢**	**4.88¢**	**11.53¢**	**5.37¢**	**6.58¢**	**6.56¢**
1986r	7.78	7.40	5.12	11.38	5.43	6.94	6.70
1985	7.79	7.47	5.20	11.22	5.25	7.00	6.72
1984	7.53	7.33	5.07	10.78	5.26	6.97	6.52
1983	7.15	7.04	4.90	10.13	5.22	6.55	6.27
1982	6.81	6.86	4.91	9.54	4.80	6.77	6.10
1981	6.19	6.28	4.29	8.55	4.36	6.20	5.45
1980	5.36	5.47	3.68	7.58	3.95	5.17	4.72
1979	4.63	4.68	3.06	6.60	3.33	3.80	3.99
1978	4.31	4.36	2.80	6.18	2.96	3.59	3.70
1977	4.06	4.10	2.52	5.79	2.90	3.68	3.44
1976	3.73	3.69	2.23	5.43	2.69	3.82	3.11
1975	3.51	3.46	2.09	5.14	2.51	3.79	2.94
1974	3.09	3.05	1.70	4.66	2.17	3.48	2.50
1973	2.54	2.42	1.26	4.12	1.61	2.22	1.97
1972	2.42	2.30	1.17	3.95	1.50	1.94	1.86
1971	2.32	2.21	1.11	3.78	1.42	1.73	1.78
1970	2.22	2.09	1.03	3.62	1.33	1.51	1.68
1969	2.21	2.06	0.99	3.51	1.29	1.40	1.63
1968	2.25	2.08	0.98	3.41	1.31	1.36	1.64
1967	2.31	2.12	0.99	3.36	1.32	1.34	1.66

Based on sales data in Table 39 and revenue data in Table 57. p Preliminary. r Revised.

TABLE 65

AVERAGE ANNUAL REVENUE PER CUSTOMER

TOTAL ELECTRIC UTILITY INDUSTRY				INVESTOR-OWNED ELECTRIC UTILITIES			
Year	Total Ultimate Customers	Residential	Commercial	Year	Total Ultimate Customers	Residential	Commercial
1987p	**$1,500.29**	**$687.49**	**$4,144.51**	**1987p**	**$1,551.76**	**$683.65**	**$4,547.64**
1986r	1,493.81	675.17	4,126.94	1986r	1,553.65	671.60	4,548.55
1985	1,481.57	658.11	4,080.42	1985	1,555.15	661.10	4,522.66
1984	1,452.62	643.75	3,939.57	1984	1,511.99	640.47	4,346.35
1983	1,348.80	601.77	3,660.14	1983	1,397.10	599.44	4,011.41
1982	1,285.29	563.09	3,452.36	1982	1,338.79	562.54	3,867.11
1981	1,188.44	517.39	3,206.52	1981	1,239.87	514.38	3,499.79
1980	1,040.22	461.81	2,848.00	1980	1,083.26	457.29	3,022.55
1979	897.17	391.30	2,394.04	1979	928.41	387.34	2,555.09
1978	807.12	356.74	2,176.91	1978	858.50	363.56	2,384.37
1977	739.86	328.99	2,031.41	1977	789.43	336.24	2,234.20
1976	646.33	288.39	1,754.26	1976	692.11	297.14	1,942.05
1975	579.03	262.26	1,579.55	1975	626.39	275.86	1,763.39
1974	493.43	223.73	1,327.40	1974	534.25	234.33	1,474.97
1973	408.14	192.35	1,096.55	1973	433.66	197.38	1,197.68
1972	371.01	176.39	988.78	1972	391.66	179.49	1,071.15
1971	336.46	161.49	888.75	1971	354.57	163.64	961.77
1970	307.36	148.58	803.54	1970	321.42	149.42	861.21
1969	285.99	137.45	735.27	1969	298.71	138.06	784.21
1968	269.59	128.53	694.31	1968	281.36	128.95	739.04
1967	254.90	120.85	652.20	1967	264.84	120.93	688.26

Based on revenue data in Tables 56 and 57, and average number of customers per year. p Preliminary. r Revised

TABLE 66A

REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER

BY STATE—YEAR 1987p

Division/State	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$1,500.29**	**6.40¢**	**23,453**	**$1,551.76**	**6.56¢**	**23,652**
Maine	1,170.76	6.52	17,966	1,183.65	6.47	18,288
New Hampshire	1,287.52	8.32	15,474	1,359.42	8.35	16,288
Vermont	1,316.02	7.81	16,861	1,364.55	7.67	17,796
Massachusetts	1,355.90	8.00	16,949	1,348.84	7.95	16,958
Rhode Island	1,177.78	8.17	14,424	1,181.09	8.16	14,481
Connecticut	1,548.85	8.28	18,700	1,539.58	8.34	18,453
New England	**1,362.03**	**7.94**	**17,158**	**1,367.55**	**7.92**	**17,267**
New York	1,507.54	8.73	17,277	1,430.35	9.35	15,298
New Jersey	1,595.44	8.58	18,599	1,601.87	8.57	18,688
Pennsylvania	1,564.87	7.30	21,434	1,598.99	7.28	21,954
Middle Atlantic	**1,545.06**	**8.16**	**18,937**	**1,521.85**	**8.37**	**18,191**
Ohio	1,660.03	5.77	28,786	1,739.69	5.73	30,345
Indiana	1,619.08	6.06	26,734	1,759.46	5.95	29,575
Illinois	1,742.15	7.77	22,416	1,783.44	7.78	22,930
Michigan	1,305.60	6.62	19,711	1,340.79	6.65	20,172
Wisconsin	1,169.52	5.60	20,895	1,198.37	5.56	21,572
East North Central	**1,537.88**	**6.45**	**23,843**	**1,601.09**	**6.44**	**24,861**
Minnesota	1,195.12	5.36	22,289	1,325.76	4.97	26,649
Iowa	1,354.94	6.46	20,961	1,386.95	6.23	22,260
Missouri	1,380.10	6.53	21,151	1,581.01	6.66	23,755
North Dakota	1,240.44	5.99	20,722	1,048.57	5.94	17,639
South Dakota	1,070.22	6.00	17,848	1,126.10	6.28	17,942
Nebraska	1,109.78	5.29	20,986	—	—	—
Kansas	1,445.16	6.85	21,088	1,543.43	6.69	23,064
West North Central	**1,298.60**	**6.12**	**21,213**	**1,437.05**	**6.10**	**23,573**
Delaware	1,586.32	6.51	24,358	1,709.65	6.27	27,265
Maryland	1,519.52	6.01	25,283	1,537.03	5.96	25,787
District of Columbia	2,743.54	6.43	42,688	2,743.54	6.43	42,688
Virginia	1,595.39	5.77	27,673	1,668.10	5.71	29,217
West Virginia	1,262.53	5.02	25,141	1,268.31	5.02	25,285
North Carolina	1,680.33	6.21	27,052	1,891.94	6.01	31,490
South Carolina	1,896.26	5.58	33,978	2,214.81	5.65	39,186
Georgia	1,548.12	5.94	26,060	1,879.83	5.74	32,759
Florida	1,434.46	6.96	20,607	1,447.28	6.89	20,997
South Atlantic	**1,566.89**	**6.17**	**25,412**	**1,665.96**	**6.07**	**27,456**
Kentucky	1,636.22	5.19	31,549	1,492.04	4.45	33,551
Tennessee	1,829.62	5.68	32,231	1,695.24	4.38	38,738
Alabama	1,708.04	5.62	30,395	1,847.53	5.74	32,213
Mississippi	1,519.48	6.10	24,892	1,756.37	6.21	28,302
East South Central	**1,699.00**	**5.60**	**30,364**	**1,697.57**	**5.30**	**32,018**
Arkansas	1,420.87	6.46	21,997	1,595.79	6.33	25,204
Louisiana	1,895.03	5.80	32,698	2,074.55	5.54	37,452
Oklahoma	1,288.26	5.66	22,746	1,394.89	5.32	26,219
Texas	1,651.07	5.48	30,125	1,815.60	5.29	34,335
West South Central	**1,618.57**	**5.63**	**28,757**	**1,787.67**	**5.40**	**33,075**
Montana	1,147.42	3.83	29,965	1,042.20	4.17	24,985
Idaho	1,300.56	3.69	35,256	1,351.66	3.61	37,420
Wyoming	1,943.42	4.41	44,093	2,037.95	3.98	51,226
Colorado	1,040.26	5.85	17,780	1,055.37	5.77	18,301
New Mexico	1,442.54	7.53	19,161	1,470.92	7.40	19,875
Arizona	1,805.04	7.29	24,760	1,887.31	8.16	23,127
Utah	1,488.02	6.48	22,949	1,553.55	6.72	23,135
Nevada	1,435.72	5.23	27,435	1,411.63	5.53	25,542
Mountain	**1,421.42**	**5.85**	**24,317**	**1,437.74**	**5.89**	**24,416**
Washington	1,239.42	3.31	37,495	1,116.06	4.65	23,984
Oregon	1,303.02	4.39	29,702	1,294.11	4.95	26,163
California	1,343.75	7.75	17,329	1,353.35	8.28	16,337
Pacific	**1,325.52**	**8.24**	**21,241**	**1,326.84**	**7.40**	**17,926**
Alaska	1,573.40	8.85	17,783	1,843.29	9.18	20,086
Hawaii	1,761.50	8.26	21,326	1,761.50	8.26	21,326
Alaska & Hawaii	**1,686.41**	**8.46**	**19,950**	**1,764.66**	**8.29**	**21,278**

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TABLE 66B

REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER

BY STATE—YEAR 1986r

Division/State	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg Annual Revenue per Customer	Avg Revenue per kWh Sold	Avg Annual kWh Use per Customer	Avg Annual Revenue per Customer	Avg Revenue per kWh Sold	Avg Annual kWh Use per Customer
Total United States	**$1,493.81**	**6.47¢**	**23,071**	**$1,553.65**	**6.70¢**	**23,201**
Maine	1,191.15	6.78	17,562	1,211.45	6.77	17,884
New Hampshire	1,160.33	7.63	15,215	1,222.14	7.62	16,037
Vermont	1,291.15	7.73	16,706	1,349.55	7.65	17,652
Massachusetts	1,275.61	7.73	16,507	1,272.57	7.71	16,515
Rhode Island	1,118.78	7.96	14,056	1,122.17	7.95	14,111
Connecticut	1,532.30	8.38	18,283	1,525.85	8.46	18,039
New England	**1,308.07**	**7.80**	**16,765**	**1,317.56**	**7.81**	**16,872**
New York	1,499.18	8.81	17,018	1,422.16	9.52	14,945
New Jersey	1,700.56	9.37	18,149	1,709.78	9.38	18,233
Pennsylvania	1,547.51	7.45	20,784	1,582.60	7.44	21,276
Middle Atlantic	**1,557.27**	**8.41**	**18,508**	**1,535.33**	**8.67**	**17,710**
Ohio	1,627.90	5.86	27,787	1,705.00	5.83	29,232
Indiana	1,592.89	6.11	26,058	1,734.42	6.02	28,816
Illinois	1,670.30	7.60	21,964	1,705.01	7.59	22,456
Michigan	1,344.23	6.96	19,301	1,371.80	6.95	19,733
Wisconsin	1,168.17	5.79	20,191	1,196.63	5.78	20,714
East North Central	**1,515.72**	**6.53**	**23,200**	**1,574.19**	**6.52**	**24,150**
Minnesota	1,176.94	5.48	21,483	1,314.39	5.21	25,205
Iowa	1,348.71	6.55	20,593	1,373.88	6.36	21,613
Missouri	1,319.08	6.33	20,829	1,502.28	6.40	23,460
North Dakota	1,274.64	5.91	21,571	1,073.64	5.92	18,130
South Dakota	1,068.81	5.99	17,857	1,139.29	6.43	17,712
Nebraska	1,103.87	5.29	20,882	—	—	—
Kansas	1,462.84	7.00	20,895	1,553.83	6.88	22,598
West North Central	**1,279.22**	**6.13**	**20,866**	**1,409.01**	**6.14**	**22,933**
Delaware	1,595.91	6.50	24,566	1,713.43	6.21	27,587
Maryland	1,551.38	6.36	24,390	1,573.37	6.32	24,887
District of Columbia	2,818.78	6.84	41,239	2,818.78	6.84	41,239
Virginia	1,564.54	5.77	27,124	1,641.38	5.72	28,680
West Virginia	1,254.61	5.04	24,873	1,260.53	5.04	25,015
North Carolina	1,633.61	6.22	26,284	1,837.75	6.02	30,547
South Carolina	1,841.98	5.55	33,213	2,125.35	5.57	38,153
Georgia	1,495.20	5.76	25,952	1,864.88	5.74	32,481
Florida	1,473.96	7.24	20,355	1,496.97	7.16	20,903
South Atlantic	**1,559.16**	**6.25**	**24,941**	**1,668.55**	**6.18**	**27,001**
Kentucky	1,605.56	5.12	31,355	1,540.55	4.60	33,473
Tennessee	1,728.10	5.32	32,513	1,667.03	4.42	37,715
Alabama	1,675.24	5.67	29,550	1,827.32	5.90	30,948
Mississippi	1,525.82	6.14	24,837	1,819.12	6.41	28,368
East South Central	**1,650.52**	**5.47**	**30,163**	**1,718.69**	**5.46**	**31,452**
Arkansas	1,419.72	6.67	21,281	1,596.85	6.60	24,198
Louisiana	1,904.31	5.87	32,463	2,076.58	5.54	37,459
Oklahoma	1,359.66	6.08	22,343	1,498.95	5.84	25,669
Texas	1,701.04	5.73	29,708	1,890.23	5.52	34,235
West South Central	**1,660.79**	**5.86**	**28,362**	**1,847.39**	**5.62**	**32,855**
Montana	1,111.29	3.71	29,925	1,012.46	4.12	24,557
Idaho	1,299.38	3.73	34,881	1,347.65	3.66	36,830
Wyoming	1,861.67	4.46	41,713	1,878.63	3.98	47,238
Colorado	1,055.74	5.99	17,613	1,084.59	6.00	18,072
New Mexico	1,430.62	7.48	19,136	1,438.72	7.30	19,698
Arizona	1,770.47	7.41	23,890	1,862.19	8.19	22,743
Utah	1,496.85	6.61	22,630	1,571.98	6.89	22,814
Nevada	1,532.63	5.81	26,393	1,529.86	6.22	24,586
Mountain	**1,415.40**	**5.94**	**23,828**	**1,439.78**	**6.02**	**23,920**
Washington	1,191.20	3.15	37,840	1,102.73	4.59	24,005
Oregon	1,265.70	4.39	28,817	1,274.79	4.94	25,810
California	1,354.72	7.88	17,185	1,374.29	8.54	16,085
Pacific	**1,323.56**	**6.26**	**21,155**	**1,340.80**	**7.57**	**17,705**
Alaska	1,545.82	8.47	18,248	1,425.20	7.19	19,831
Hawaii	1,685.49	8.00	21,073	1,685.49	8.00	21,073
Alaska & Hawaii	**1,630.37**	**8.17**	**19,958**	**1,674.41**	**7.97**	**21,020**

r Revised.

TABLE 67A

REVENUE AND USE PER RESIDENTIAL CUSTOMER

BY STATE—YEAR 1987p

	Total Electric Utility Industry			Investor-Owned Electric Utilities		
Division/State	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$687.49**	**7.45¢**	**9,229**	**$683.65**	**7.75¢**	**8,816**
Maine	568.19	8.12	6,998	569.44	8.09	7,036
New Hampshire	669.83	9.30	7,200	686.79	9.45	7,265
Vermont	642.36	7.97	8,059	654.99	7.90	8,290
Massachusetts	574.71	8.66	6,634	574.52	8.74	6,571
Rhode Island	526.08	8.84	5,948	526.09	8.84	5,953
Connecticut	708.06	9.15	7,738	712.86	9.19	7,761
New England	**615.21**	**8.77**	**7,014**	**619.18**	**8.83**	**7,014**
New York	612.78	[illegible]	5,822	618.20	10.80	5,726
New Jersey	686.93	9.89	6,943	687.44	9.91	6,939
Pennsylvania	708.07	8.85	8,001	708.29	8.84	8,013
Middle Atlantic	**660.21**	**9.73**	**6,787**	**662.46**	**9.84**	**6,735**
Ohio	[illegible]	7.70	9,047	701.26	7.81	8,976
Indiana	[illegible]	7.31	10,042	718.55	7.30	9,841
Illinois	767.24	10.18	7,538	760.51	10.39	7,317
Michigan	[illegible]	7.31	6,816	504.89	7.34	6,883
Wisconsin	538.62	6.75	7,984	522.24	6.76	7,725
East North Central	**656.92**	**8.06**	**8,148**	**654.63**	**8.19**	**7,989**
Minnesota	548.38	6.62	8,279	461.18	6.32	7,294
Iowa	[illegible]	7.82	8,955	664.49	8.22	8,084
Missouri	[illegible]	7.37	9,855	754.71	7.68	9,831
North Dakota	[illegible]	6.36	10,608	548.93	6.28	8,737
South Dakota	661.92	6.80	9,729	574.97	7.32	7,853
Nebraska	592.80	5.93	10,003	—	—	—
Kansas	705.10	8.11	8,696	719.52	7.99	9,004
West North Central	**659.81**	**7.17**	**9,204**	**646.15**	**7.49**	**8,632**
Delaware	742.78	8.35	8,901	763.03	8.47	9,008
Maryland	740.09	6.89	10,745	728.45	6.85	10,634
District of Columbia	497.44	6.53	7,617	497.44	6.53	7,617
Virginia	830.76	6.65	12,492	835.06	6.60	12,645
West Virginia	598.80	6.08	9,841	599.92	6.08	9,867
North Carolina	879.67	7.32	12,013	905.16	7.26	12,470
South Carolina	906.70	7.17	12,654	942.89	7.23	13,048
Georgia	745.63	6.76	11,034	718.41	6.70	10,726
Florida	879.42	7.70	11,424	886.73	7.72	11,490
South Atlantic	**823.05**	**7.17**	**11,479**	**823.07**	**7.15**	**11,518**
Kentucky	647.11	5.73	11,292	612.70	5.49	11,168
Tennessee	836.44	5.69	14,708	799.64	4.88	16,375
Alabama	796.29	6.57	12,124	807.75	6.82	11,850
Mississippi	766.46	6.57	11,659	783.25	6.75	11,600
East South Central	**768.23**	**6.06**	**12,687**	**731.79**	**6.30**	**11,620**
Arkansas	781.82	7.67	10,193	788.10	7.71	10,228
Louisiana	886.84	7.12	12,456	862.06	6.84	12,608
Oklahoma	703.84	6.77	10,390	692.75	6.53	10,604
Texas	794.16	6.72	11,822	826.27	6.66	12,401
West South Central	**795.68**	**6.87**	**11,575**	**812.37**	**6.75**	**12,031**
Montana	482.86	5.23	9,231	439.18	5.19	8,457
Idaho	621.44	4.62	13,460	621.38	4.57	13,583
Wyoming	517.30	6.16	8,399	468.92	6.05	7,750
Colorado	468.68	6.86	6,836	436.29	7.00	6,234
New Mexico	552.96	9.09	6,080	558.01	8.91	6,264
Arizona	904.57	8.57	10,552	909.40	9.24	9,846
Utah	587.90	7.91	7,432	612.42	8.51	7,196
Nevada	655.98	5.82	11,276	661.39	5.87	11,272
Mountain	**632.56**	**7.14**	**8,858**	**613.70**	**7.18**	**8,547**
Washington	584.00	4.13	14,146	646.67	5.02	12,891
Oregon	591.57	4.81	12,301	594.65	5.07	11,738
California	498.97	8.03	6,214	515.29	8.30	6,206
Pacific	**519.04**	**6.60**	**7,868**	**534.35**	**7.31**	**7,312**
Alaska	788.26	9.58	8,226	974.62	8.47	11,501
Hawaii	661.15	9.43	7,009	661.15	9.43	7,009
Alaska & Hawaii	**710.34**	**9.50**	**7,480**	**672.86**	**9.38**	**7,176**

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TABLE 67B

REVENUE AND USE PER RESIDENTIAL CUSTOMER

BY STATE—YEAR 1986r

Division/State	Total Electric Utility Industry: Avg. Annual Revenue per Customer	Total Electric Utility Industry: Avg. Revenue per kWh Sold	Total Electric Utility Industry: Avg. Annual kWh Use per Customer	Investor-Owned Electric Utilities: Avg. Annual Revenue per Customer	Investor-Owned Electric Utilities: Avg. Revenue per kWh Sold	Investor-Owned Electric Utilities: Avg. Annual kWh Use per Customer
Total United States	**$675.17**	**7.43¢**	**9,090**	**$671.60**	**7.78¢**	**8,627**
Maine	567.20	8.19	6,922	571.16	8.21	6,959
New Hampshire	607.83	8.55	7,108	620.89	8.64	7,189
Vermont	640.30	7.91	8,094	653.85	7.84	8,338
Massachusetts	534.67	8.33	6,419	535.18	8.43	6,351
Rhode Island	497.56	8.69	5,728	497.66	8.68	5,733
Connecticut	691.30	9.29	7,439	696.75	9.34	7,458
New England	**585.65**	**8.59**	**6,815**	**590.55**	**8.67**	**6,810**
New York	594.13	10.55	5,634	599.24	10.83	5,533
New Jersey	708.49	10.66	6,648	709.80	10.69	6,640
Pennsylvania	688.05	8.87	7,758	688.83	8.88	7,759
Middle Atlantic	**649.36**	**9.90**	**6,557**	**651.94**	**10.03**	**6,499**
Ohio	672.72	7.67	8,768	675.95	7.80	8,671
Indiana	715.73	7.22	9,907	697.67	7.22	9,664
Illinois	696.87	9.48	7,352	682.27	9.61	7,102
Michigan	498.55	7.56	6,592	506.31	7.62	6,646
Wisconsin	543.97	6.86	7,934	528.20	6.91	7,646
East North Central	**630.62**	**7.93**	**7,953**	**624.68**	**8.05**	**7,765**
Minnesota	553.02	6.63	8,339	465.89	6.45	7,221
Iowa	691.30	7.71	8,967	646.24	8.15	7,933
Missouri	693.86	7.13	9,731	708.26	7.36	9,621
North Dakota	699.51	6.22	11,245	572.22	6.22	9,203
South Dakota	665.23	6.64	10,017	585.10	7.41	7,897
Nebraska	582.29	5.90	9,870	—	—	—
Kansas	700.51	8.20	8,540	715.03	8.14	8,785
West North Central	**649.79**	**7.07**	**9,188**	**629.06**	**7.40**	**8,499**
Delaware	715.05	8.50	8,413	720.97	8.55	8,437
Maryland	735.34	7.22	10,178	726.64	7.21	10,083
District of Columbia	496.91	6.83	7,279	496.91	6.83	7,279
Virginia	807.73	6.66	12,133	817.22	6.63	12,322
West Virginia	583.86	6.10	9,576	585.07	6.09	9,601
North Carolina	841.08	7.23	11,626	861.40	7.15	12,051
South Carolina	884.74	7.14	12,396	908.10	7.10	12,791
Georgia	736.63	6.72	10,959	716.13	6.70	10,692
Florida	904.72	7.98	11,335	916.75	8.00	11,456
South Atlantic	**817.31**	**7.28**	**11,232**	**819.28**	**7.26**	**11,281**
Kentucky	635.31	5.79	10,975	617.64	5.75	10,739
Tennessee	764.03	5.21	14,654	786.40	4.94	15,929
Alabama	774.10	6.47	11,956	798.09	6.97	11,457
Mississippi	764.46	6.54	11,694	810.75	6.95	11,670
East South Central	**735.36**	**5.86**	**12,547**	**734.62**	**6.50**	**11,303**
Arkansas	768.33	7.75	9,913	773.82	7.79	9,932
Louisiana	897.22	7.09	12,653	856.02	6.66	12,853
Oklahoma	721.39	7.07	10,204	721.59	6.94	10,398
Texas	801.22	6.90	11,619	833.84	6.86	12,161
West South Central	**802.79**	**7.02**	**11,435**	**818.35**	**6.89**	**11,872**
Montana	489.16	5.02	9,752	447.68	5.00	8,961
Idaho	631.86	4.49	14,075	633.70	4.44	14,270
Wyoming	514.03	6.03	8,518	458.57	5.82	7,886
Colorado	472.40	7.04	6,710	446.94	7.31	6,113
New Mexico	536.31	9.03	5,939	537.59	8.80	6,107
Arizona	869.21	8.67	10,027	877.37	9.37	9,366
Utah	598.34	7.95	7,526	627.28	8.56	7,327
Nevada	707.05	6.59	10,732	716.56	6.69	10,708
Mountain	**626.63**	**7.19**	**8,719**	**614.27**	**7.27**	**8,450**
Washington	591.29	3.91	15,114	654.64	4.92	13,307
Oregon	586.47	4.73	12,405	589.26	4.98	11,840
California	484.80	7.95	6,101	502.53	8.26	6,082
Pacific	**509.04**	**6.40**	**7,954**	**524.32**	**7.21**	**7,269**
Alaska	776.31	9.05	8,581	771.26	7.32	10,537
Hawaii	632.03	9.28	6,808	632.03	9.28	6,808
Alaska & Hawaii	**688.82**	**9.18**	**7,506**	**637.80**	**9.16**	**6,962**

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TABLE 68A

REVENUE AND USE PER COMMERCIAL CUSTOMER

BY STATE—YEAR 1987p

Division/State	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$4,144.51**	**7.10¢**	**58,401**	**$4,547.64**	**7.24¢**	**62,802**
Maine	2,814.20	6.89	40,816	2,891.85	6.87	42,093
New Hampshire	2,467.51	8.55	28,845	2,528.94	8.59	29,429
Vermont	3,584.46	8.28	43,270	4,086.13	8.24	49,612
Massachusetts	5,149.33	7.93	64,945	5,360.26	7.85	68,271
Rhode Island	4,233.65	7.90	53,616	4,262.88	7.89	54,028
Connecticut	6,779.39	8.24	82,247	6,946.19	8.23	84,405
New England	**4,779.50**	**7.99**	**59,845**	**4,964.37**	**7.94**	**62,525**
New York	5,662.37	9.97	56,789	5,755.24	10.05	57,282
New Jersey	5,575.32	8.58	65,017	5,623.26	8.56	65,678
Pennsylvania	4,018.58	7.65	52,501	4,071.45	7.65	53,225
Middle Atlantic	**5,141.95**	**8.97**	**57,296**	**5,217.53**	**9.01**	**57,922**
Ohio	4,634.93	7.06	65,678	4,937.54	7.08	69,701
Indiana	3,974.91	6.46	61,516	4,331.04	6.40	67,667
Illinois	5,412.74	8.10	66,823	5,504.86	8.16	67,448
Michigan	3,943.88	7.59	51,972	3,970.56	7.73	51,392
Wisconsin	3,094.97	6.08	50,897	3,499.07	6.11	57,258
East North Central	**4,376.74**	**7.25**	**60,388**	**4,614.97**	**7.30**	**63,220**
Minnesota	2,332.04	5.90	39,515	2,106.40	5.65	37,256
Iowa	2,724.29	7.21	37,811	2,811.73	7.00	40,155
Missouri	4,514.70	6.49	69,570	5,353.90	6.63	80,780
North Dakota	2,247.10	6.71	33,496	1,767.36	6.62	26,688
South Dakota	2,511.31	6.49	38,704	2,710.22	6.60	41,066
Nebraska	2,330.19	5.67	41,072	—	—	—
Kansas	3,778.82	6.88	54,903	4,807.93	6.65	72,266
West North Central	**3,199.94**	**6.48**	**49,388**	**3,683.19**	**6.55**	**56,230**
Delaware	4,880.52	6.77	72,048	5,561.40	6.58	84,457
Maryland	4,151.36	6.73	61,648	4,176.87	6.72	62,140
District of Columbia	12,391.52	6.93	178,745	12,391.52	6.93	178,745
Virginia	4,566.69	5.87	77,733	4,912.91	5.82	84,441
West Virginia	2,890.90	5.62	51,454	2,906.37	5.61	51,769
North Carolina	3,660.65	6.31	58,052	3,761.10	6.16	61,008
South Carolina	3,461.72	6.24	55,456	3,848.79	6.27	61,424
Georgia	4,843.48	6.73	71,925	5,545.58	6.71	82,645
Florida	4,262.72	6.63	64,313	4,622.98	6.51	70,973
South Atlantic	**4,235.67**	**6.44**	**65,744**	**4,548.10**	**6.37**	**71,452**
Kentucky	2,778.55	5.56	50,011	3,056.26	5.36	56,992
Tennessee	2,214.96	6.32	35,030	3,712.11	5.17	71,779
Alabama	3,189.99	6.68	47,719	3,778.03	6.70	56,373
Mississippi	3,365.52	6.91	48,705	4,034.78	6.86	58,817
East South Central	**2,822.54**	**6.35**	**44,461**	**3,580.20**	**6.25**	**57,298**
Arkansas	3,351.95	6.54	51,245	3,680.84	6.35	58,001
Louisiana	4,379.74	6.75	64,863	4,862.33	6.57	74,046
Oklahoma	3,105.52	5.96	52,120	3,717.40	5.66	65,735
Texas	3,874.64	5.90	65,637	4,378.10	5.75	76,097
West South Central	**3,793.31**	**6.08**	**62,406**	**4,315.15**	**5.91**	**73,046**
Montana	2,097.36	4.68	44,836	2,155.36	4.49	48,053
Idaho	2,779.57	4.16	66,788	2,832.59	4.14	68,484
Wyoming	2,888.28	5.39	53,577	2,459.35	5.09	48,355
Colorado	3,527.71	5.76	61,261	4,429.29	5.50	80,520
New Mexico	4,026.79	8.36	48,143	4,815.06	8.45	56,976
Arizona	6,175.31	7.79	79,271	6,212.57	8.61	72,155
Utah	5,324.31	6.98	76,242	5,711.97	7.59	75,209
Nevada	3,263.07	5.90	55,339	3,292.95	5.98	55,033
Mountain	**4,048.81**	**6.43**	**62,976**	**4,303.25**	**6.43**	**66,918**
Washington	2,943.54	3.93	74,909	3,620.33	4.91	73,689
Oregon	3,293.50	5.02	65,599	3,517.06	5.46	64,370
California	4,289.92	8.56	50,145	4,540.42	8.97	50,630
Pacific	**4,023.77**	**7.35**	**54,770**	**4,363.59**	**8.10**	**53,848**
Alaska	5,365.14	8.26	64,917	4,042.52	12.77	31,656
Hawaii	3,967.02	9.41	42,147	3,967.02	9.41	42,147
Alaska & Hawaii	**4,516.20**	**8.84**	**51,061**	**3,969.80**	**9.51**	**41,760**

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TABLE 68B

REVENUE AND USE PER COMMERCIAL CUSTOMER

BY STATE—YEAR 1986r

Division/State	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$4,126.94**	**7.22¢**	**57,161**	**$4,548.55**	**7.40¢**	**61,462**
Maine	2,909.42	7.75	37,526	2,994.15	7.76	38,572
New Hampshire	2,177.66	7.89	27,600	2,221.86	7.91	28,096
Vermont	2,484.21	8.18	30,359	2,730.52	8.14	33,558
Massachusetts	4,915.14	7.75	63,440	5,115.52	7.68	66,607
Rhode Island	4,057.57	7.73	52,483	4,083.52	7.73	52,847
Connecticut	6,683.22	8.33	80,219	6,858.08	8.33	82,360
New England	**4,565.76**	**7.93**	**57,559**	**4,741.20**	**7.90**	**60,013**
New York	5,783.71	10.28	56,269	5,881.75	10.36	56,767
New Jersey	5,918.05	9.41	62,922	5,974.12	9.40	63,554
Pennsylvania	3,976.82	7.77	51,176	4,031.67	7.77	51,876
Middle Atlantic	**5,258.30**	**9.36**	**56,164**	**5,339.37**	**9.40**	**56,779**
Ohio	4,575.46	7.11	64,392	4,875.82	7.14	68,327
Indiana	3,355.62	6.11	54,939	3,597.09	6.00	59,969
Illinois	5,386.42	8.17	65,927	5,472.22	8.23	66,521
Michigan	4,145.31	8.15	50,854	4,045.38	8.06	50,197
Wisconsin	3,092.86	6.32	48,974	3,504.53	6.37	54,985
East North Central	**4,318.49**	**7.39**	**58,428**	**4,519.34**	**7.40**	**61,099**
Minnesota	2,307.71	5.97	38,670	2,104.47	5.78	36,421
Iowa	2,726.52	7.38	36,965	2,819.95	7.19	39,208
Missouri	4,275.61	6.36	67,201	5,114.30	6.41	79,819
North Dakota	2,357.11	6.65	35,457	1,899.99	6.49	29,282
South Dakota	2,505.15	6.60	37,969	2,753.39	6.79	40,578
Nebraska	2,302.71	5.71	40,356	—	—	—
Kansas	3,860.38	7.03	54,907	4,860.88	6.81	71,331
West North Central	**3,145.91**	**6.50**	**48,383**	**3,620.46**	**6.54**	**55,378**
Delaware	4,885.50	6.83	71,523	5,489.50	6.63	82,841
Maryland	4,359.86	7.21	60,463	4,394.59	7.21	60,956
District of Columbia	12,760.89	7.38	172,916	12,760.89	7.38	172,916
Virginia	4,484.08	5.92	75,704	4,818.06	5.87	82,025
West Virginia	2,886.47	5.65	51,082	2,901.96	5.65	51,393
North Carolina	3,576.36	6.29	56,828	3,662.83	6.15	59,572
South Carolina	3,398.82	6.20	54,771	3,752.83	6.18	60,678
Georgia	4,326.65	6.07	71,330	5,411.70	6.69	80,948
Florida	4,357.98	6.86	63,497	4,746.61	6.74	70,411
South Atlantic	**4,189.02**	**6.48**	**64,665**	**4,560.26**	**6.50**	**70,195**
Kentucky	2,777.63	5.74	48,430	3,120.17	5.65	55,270
Tennessee	1,991.06	6.02	33,076	3,615.87	5.16	70,112
Alabama	3,160.47	6.76	46,773	3,739.92	6.87	54,472
Mississippi	3,425.55	6.96	49,240	4,157.02	7.04	59,020
East South Central	**2,758.58**	**6.36**	**43,380**	**3,612.63**	**6.46**	**55,928**
Arkansas	3,360.61	6.67	50,421	3,670.70	6.46	56,806
Louisiana	4,383.56	6.75	64,930	4,811.62	6.49	74,162
Oklahoma	3,271.71	6.35	51,522	3,958.19	6.12	64,708
Texas	3,939.68	6.16	63,963	4,485.83	5.96	75,254
West South Central	**3,860.30**	**6.30**	**61,242**	**4,405.86**	**6.09**	**72,305**
Montana	2,048.58	4.54	45,127	2,068.67	4.34	47,714
Idaho	2,761.91	4.20	65,760	2,815.03	4.17	67,520
Wyoming	2,875.06	5.42	53,082	2,436.74	4.99	48,806
Colorado	3,584.31	5.88	60,927	4,575.60	5.69	80,372
New Mexico	3,919.88	8.32	47,095	4,602.22	8.40	54,785
Arizona	6,029.57	7.95	75,808	6,082.59	8.64	70,394
Utah	5,331.46	7.05	75,659	5,716.24	7.70	74,223
Nevada	3,493.34	6.48	53,885	3,559.90	6.64	53,615
Mountain	**4,024.98**	**6.52**	**61,687**	**4,305.02**	**6.53**	**65,945**
Washington	2,829.60	3.72	76,062	3,488.49	4.8[illegible]	72,243
Oregon	3,198.79	4.92	64,975	3,404.71	5.3[illegible]	63,578
California	4,313.85	8.81	48,949	4,577.97	9.25	49,500
Pacific	**4,017.35**	**7.45**	**53,957**	**4,372.71**	**8.29**	**52,721**
Alaska	5,266.18	8.06	65,351	3,321.06	10.53	31,535
Hawaii	3,737.56	9.19	40,660	3,737.56	9.19	40,660
Alaska & Hawaii	**4,347.31**	**8.61**	**50,509**	**3,718.21**	**9.24**	**40,236**

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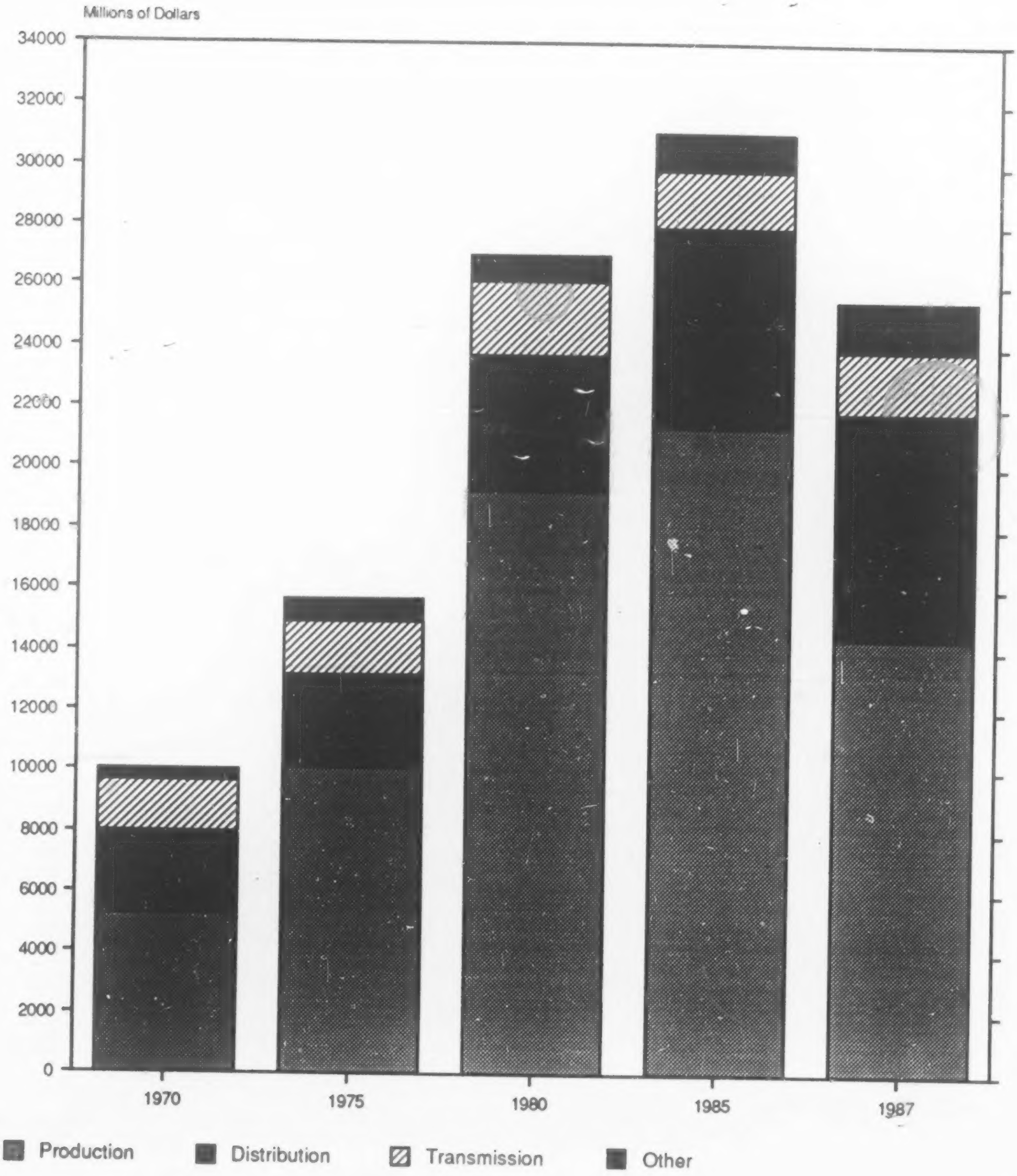
FINANCIAL

SECTION IX

CHART IX-A

CONSTRUCTION EXPENDITURES

INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 69, page 83.

TABLE 69

CONSTRUCTION EXPENDITURES INVESTOR-OWNED ELECTRIC UTILITIES

BY TYPE OF ELECTRIC UTILITY PLANT

MILLIONS OF DOLLARS

	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Production											
Steam	$ 4,478	$ 4,333	$ 4,725	$ 5,569	$ 5,860	$ 7,828	$ 7,221	$ 7,498	$ 7,572	$ 6,664	$ 6,529
Nuclear	9,239	13,426	15,553	17,478	18,208	16,461	12,785	11,045	9,855	8,813	7,273
Other	678	724	1,095	893	868	1,050	906	695	854	655	614
Total	**14,395**	**18,483**	**21,372**	**23,939**	**24,935**	**25,339**	**20,912**	**19,238**	**18,281**	**16,132**	**14,416**
Transmission	2,066	1,761	1,863	2,250	2,371	2,203	2,270	2,353	2,090	1,736	1,687
Distribution	7,457	7,248	6,590	5,899	5,021	4,827	4,606	4,483	4,334	3,875	3,390
General/Miscellaneous*	1,585	1,808	1,266	1,355	1,489	1,233	1,336	937	776	1,192	788
Subtotal	**25,503**	**29,299**	**31,091**	**33,443**	**33,816**	**33,002**	**29,124**	**27,011**	**25,481**	**22,937**	**20,281**
Nuclear Fuel	1,532	1,724	2,202	1,842	1,749	1,748	1,566	1,324	1,338	1,093	1,016
GRAND TOTAL	**$27,035**	**$31,023**	**$33,294**	**$35,285**	**$35,565**	**$35,350**	**$30,690**	**$28,335**	**$26,819**	**$24,030**	**$21,297**
AFUDC included in TOTAL	$ 4,579	$ 5,659	$ 6,941	$ 7,923	$ 7,816	$ 6,612	$ 5,358	$ 4,365	$ 3,593	$ 2,717	$ 2,267

	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
Production										
Steam	$ 5,689	$ 5,062	$ 5,323	$ 4,923	$ 4,306	$ 3,507	$ 2,790	$ 2,227	$ 2,076	$ 1,735
Nuclear	5,815	4,545	3,969	3,270	2,920	2,410	1,641	1,120	679	433
Other	460	487	802	662	691	620	818	550	347	311
Total	**11,964**	**10,094**	**10,094**	**8,855**	**7,917**	**6,537**	**5,249**	**3,897**	**3,102**	**2,479**
Transmission	1,832	1,771	2,145	1,878	1,749	1,818	1,625	1,555	1,378	1,329
Distribution	2,974	3,075	3,538	3,568	3,192	2,869	2,751	2,511	2,299	2,102
General/Miscellaneous*	590	710	880	758	605	633	422	394	339	294
Subtotal	**17,360**	**15,650**	**16,702**	**15,059**	**13,463**	**11,857**	**10,047**	**8,357**	**7,118**	**6,204**
Nuclear Fuel	798	541	490	232	265	361	217	N/A	N/A	N/A
GRAND TOTAL	**$18,158**	**$16,191**	**$17,192**	**$15,291**	**$13,728**	**$12,218**	**$10,264**	**$ 8,357**	**$ 7,118**	**$ 6,204**
AFUDC included in TOTAL	$ 1,854	$ 1,676	$ 1,576	$ 1,277	$ 1,078	$ 809	$ 583	$ 398	$ 270	$ 185

Note Total may not equal sum of components due to independent rounding

This table has been restructured based on data submitted to the Institute Data, compiled on a 50 state basis, now includes nuclear fuel and reflects the amount of AFUDC in the total

Construction expenditures are, in general, the gross amounts spent for construction of all kinds, including the acquisition of real estate and all necessary equipment

The figures include money spent for replacements, additions, and betterments (but not for maintenance of existing plant) as well as for new construction

**Includes intangible plant*

N/A Not Available

TABLE 70

COMBINED BALANCE SHEETS—YEAR ENDED DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1987	1986	1985	1984	1983	1982
ASSETS						
Utility Plant						
Electric	$387,154	$348,400	$317,392	$277,374	$252,294	$229,590
Other	21,886	21,698	18,954	18,219	17,745	16,897
Total Utility Plant	**409,039**	**370,097**	**336,345**	**295,592**	**270,039**	**246,487**
Accumulated Provision for Depreciation and Amortization	112,029	102,243	92,567	84,306	77,073	70,014
Net Utility Plant	**297,011**	**267,854**	**243,778**	**211,285**	**192,967**	**176,473**
Nuclear Fuel	18,440	15,009	13,979	11,587	9,421	8,056
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	8,697	6,466	5,461	4,219	3,755	3,591
Net Nuclear Fuel	**9,744**	**8,543**	**8,518**	**7,368**	**5,665**	**4,465**
Construction Work in Progress	51,510	74,978	84,092	95,491	93,619	90,320
NetTotal Utility Plant	**358,264**	**351,375**	**336,389**	**314,145**	**292,250**	**271,258**
Other Property and Investment	15,174	11,887	9,557	9,359	8,367	6,656
Total Current and Accrued Assets	41,515	38,824	40,427	37,823	33,196	31,799
Total Deferred Debits	24,916	21,635	16,194	18,065	12,001	7,486
Total Assets	**$439,869**	**$423,722**	**$402,567**	**$379,392**	**$345,814**	**$317,198**
CAPITALIZATION AND LIABILITIES						
Capitalization						
Common Capital Stock	$ 53,367	$ 51,658	$ 51,556	$ 47,842	$ 44,742	$ 40,491
Other Paid-In Capital Excluding Retained Earnings*	37,006	37,366	34,036	33,886	31,580	27,305
Retained Earnings*	50,904	49,362	43,902	40,423	35,369	30,984
Total Common Capital Stock Equity	**141,277**	**138,386**	**129,495**	**122,151**	**111,691**	**98,779**
Preferred Stock	26,661	27,947	30,614	29,882	29,479	28,616
Long-Term Debt						
Mortgage Bonds	115,358	115,370	111,763	108,997	104,244	98,998
Other Long-Term Debt	40,824	38,058	37,180	32,696	28,034	24,694
Total Long-Term Debt	**156,181**	**153,428**	**148,944**	**141,693**	**132,278**	**123,692**
Total Capitalization	**324,120**	**319,761**	**309,052**	**293,727**	**273,448**	**251,088**
Total Other Non-Current Liabilities	6,648	5,102	3,278	N/A	N/A	N/A
Total Current and Accrued Liabilities	44,715	40,419	38,718	36,851	33,898	33,356
Contribution in Aid of Construction	174	160	156	145	135	127
Deferred Income Taxes	39,535	35,465	29,853	26,438	21,075	18,310
Deferred Investment Tax Credits	16,983	16,760	15,931	14,136	12,059	10,408
Other Deferred Credits**	7,695	6,055	5,578	8,096	5,199	3,909
Total Liabilities	**$439,869**	**$423,722**	**$402,567**	**$379,392**	**$345,814**	**$317,198**

Note: Total may not equal sum of components due to independent rounding. Data for prior years do not reflect restatements.
Data comprising "Net Total Utility Plant" has been reformatted to reflect changes made to Schedule VI of the Uniform Statistical Report. Previous years' data have been revised for comparability.
N/A Not Applicable.
**Includes Premium on Common and Preferred Stock.*
***Data for 1984-1982 include Operating Reserves. Beginning 1985 "Total Other Non-Current Liabilities", which includes FERC System of Accounts 227, 228, and 229, is shown as a separate item.*

TABLE 71

COMBINED INCOME STATEMENTS—YEAR ENDED DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1987	1986	1985	1984	1983	1982
	ELECTRIC DEPARTMENT ONLY					
Operating Revenues	**$129,437**	**$127,552**	**$125,547**	**$120,090**	**$109,446**	**$101,693**
Operating Expenses						
Operation	59,693	57,975	61,109	59,679	55,315	54,118
Maintenance	10,304	9,688	9,191	8,482	7,577	7,124
Depreciation and Depletion	12,064	10,623	9,736	8,792	8,016	7,301
Amortization Charged to Operation	254	130	196	139	117	103
Property Losses Charged to Operation	396	412	370	318	237	184
Deferred Expenses	(1,110)	N/A	N/A	N/A	N/A	N/A
Taxes Other Than Income Taxes	9,766	9,390	8,902	8,507	7,790	7,151
Federal Income Taxes	5,884	5,877	4,637	3,857	2,845	2,853
State Income Taxes	827	807	712	705	566	715
Deferred Income Taxes:						
Property Related	4,314	4,899	4,069	3,283	2,746	1,973
Non-Property Related	(551)	352	464	1,418	1,748	(386)
Investment Tax Credit Adjustments	588	1,209	1,964	2,113	1,828	2,298
Total Operating Expenses	**102,429**	**101,360**	**101,350**	**97,294**	**88,788**	**83,435**
Operating Income	$ 27,008	$ 26,191	$ 24,197	$ 22,796	$ 20,658	$ 18,258
	ALL DEPARTMENTS					
Operating Revenues	**$144,569**	**$144,939**	**$144,642**	**$139,499**	**$129,785**	**$121,062**
Operating Expenses						
Operation	71,018	71,075	75,931	74,787	71,947	69,982
Maintenance	10,795	10,189	9,666	8,932	8,012	7,556
Depreciation and Depletion	12,848	11,416	10,447	9,476	8,609	7,856
Amortization Charged to Operation	350	274	295	228	187	122
Property Losses Charged to Operation	423	452	382	339	280	186
Deferred Expenses	(1,117)	N/A	N/A	N/A	N/A	N/A
Taxes Other Than Income Taxes	10,701	10,372	9,880	9,477	8,746	8,044
Federal Income Taxes	6,144	6,122	5,000	4,363	2,973	3,035
State Income Taxes	871	843	796	806	621	755
Deferred Income Taxes:						
Property Related	4,455	5,062	4,209	3,351	2,894	2,047
Non-Property Related	(569)	446	483	1,345	1,854	(269)
Investment Tax Credit Adjustments	575	1,244	2,027	2,218	1,911	2,377
Total Operating Expenses	**116,492**	**117,494**	**119,115**	**115,325**	**108,036**	**101,691**
Operating Income	28,077	27,444	25,530	24,174	21,749	19,371
Other Income (Non-Operating) Net	1,510	2,459	2,313	2,135	1,736	1,831
Allowance for Other Funds Used During Construction	3,190	4,189	5,098	5,155	4,980	3,889
Income Before Interest Charges (Gross Income)	**32,777**	**34,093**	**32,942**	**31,465**	**28,466**	**25,091**
Interest Charges:						
Interest on Long-Term Debt	14,317	14,711	14,470	13,540	12,430	11,483
Interest on Short-Term Debt	492	372	504	595	536	813
Amortization of Debt Discount Expense and Premium	229	193	131	98	106	72
Other Interest Expense	392	553	465	600	587	615
Allowance for Borrowed Funds Used During Construction—Credit	(1,824)	(2,286)	(2,777)	(3,061)	(3,009)	(2,917)
Total Interest Charges	13,605	13,544	12,794	11,771	10,649	10,066
Income Before Extraordinary Items	**19,172**	**20,549**	**20,148**	**19,694**	**17,816**	**15,025**
Extraordinary Items	(1,127)	(308)	(1,659)	(22)	(228)	121
Net Income	**18,045**	**20,241**	**18,489**	**19,672**	**17,589**	**15,146**
Preferred Dividend Charges	2,306	2,747	2,877	2,828	2,715	2,502
Available for Common Stock	15,739	17,494	15,613	16,844	14,874	12,643
Common Dividends	12,668	12,303	11,782	11,077	10,306	8,968
Net Income After Dividends	**$ 3,071**	**$ 5,190**	**$ 3,830**	**$ 5,767**	**$ 4,568**	**$ 3,676**

Note: Total may not equal sum of components due to independent rounding. Data from prior years do not reflect restatements. Deferred Income Taxes now shown as "Property Related" (previously shown as "Due to Liberalized Depreciation" and "Due to Accelerated Amortization") and "Non-Property Related" (previously shown as "Other Deferred Income Taxes").

( ) Denotes credit or negative value. N/A Not Applicable.

TABLE 72

DETAIL OF ELECTRIC OPERATION & MAINTENANCE EXPENSES INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1987	1986	1985	1984	1983	1982
Production	$50,583	$49,254	$53,068	$52,288	$48,408	$48,010
Transmission and Distribution	6,602	6,251	6,005	5,614	5,143	4,721
Customer Accounts	2,836	2,723	2,537	2,383	2,224	2,109
Customer Service and Information	855	826	760	745	643	512
Sales	140	93	65	47	37	34
Administrative and General	8,982	8,514	7,865	7,084	6,437	5,855
Total Operation & Maintenance Expenses	**$69,998**	**$67,663**	**$70,300**	**$68,161**	**$62,892**	**$61,242**
Cost of Fuel*	$31,042	$31,195	$36,635	$37,697	$36,174	$36,627

Note: Total may not equal sum of components due to independent rounding.
**Included in "Total Operation & Maintenance Expenses."*

TABLE 73

DETAIL OF TAXES—ELECTRIC DEPARTMENT ONLY INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1987		1986		1985	
	Amount	% of Oper Revenue	Amount	% of Oper Revenue	Amount	% of Oper Revenue
Federal Taxes						
Income	$ 5,884	4.5%	$ 5,877	4.6%	$ 4,637	3.7%
Deferred Taxes on Income*	4,116	3.2	4,610	3.6	3,810	3.0
Other Deferred Income Taxes**	(8)	N/A	1,458	1.2	2,428	1.9
Miscellaneous Taxes	918	0.7	895	0.7	818	0.7
Total Federal Taxes Charged to Income	10,911	8.4	12,841	10.1	11,693	9.3
State and Local Taxes	9,919	7.7	9,694	7.6	9,055	7.2
Total Taxes Charged to Income	**$20,829**	**16.1%**	**$22,534**	**17.7%**	**$20,748**	**16.5%**

	1984		1983		1982	
	Amount	% of Oper Revenue	Amount	% of Oper Revenue	Amount	% of Oper Revenue
Federal Taxes						
Income	$ 3,857	3.2%	$ 2,845	2.6%	$ 2,853	2.8%
Deferred Taxes on Income*	3,094	2.6	2,546	2.3	1,842	1.8
Other Deferred Income Taxes**	3,417	2.8	3,423	3.2	2,012	2.0
Miscellaneous Taxes	777	0.6	680	0.6	617	0.6
Total Federal Taxes Charged to Income	11,145	9.3	9,495	8.7	7,324	7.2
State and Local Taxes	8,740	7.3	8,028	7.3	7,280	7.2
Total Taxes Charged to Income	**$19,884**	**16.6%**	**$17,523**	**16.0%**	**$14,604**	**14.4%**

Note: Total may not equal sum of components due to independent rounding.
**Due to liberalized depreciation and accelerated amortization.*
***Includes investment tax credits reported as charges to income for the current year.*
( ) Denotes negative value. N/A Not applicable.

TABLE 74

CAPITALIZATION AND CAPITALIZATION RATIOS INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1987	1986	1985	1984	1983	1982
CAPITALIZATION OUTSTANDING						
Mortgage Bonds	$115,358	$115,370	$111,763	$108,997	$104,244	$ 98,998
Other Long-Term Debt	40,824	38,058	37,180	32,696	28,034	24,694
Total Long-Term Debt	**156,181**	**153,428**	**148,944**	**141,693**	**132,278**	**123,692**
Preferred Stock	26,661	27,947	30,614	29,882	29,479	28,616
Common Capital Stock	53,367	51,658	51,556	47,842	44,742	40,491
Other Paid-In Capital Excluding Retained Earnings*	37,006	37,366	34,036	33,886	31,580	27,305
Retained Earnings	50,904	49,362	43,902	40,423	35,369	30,984
Total Capitalization	**$324,120**	**$319,761**	**$309,052**	**$293,727**	**$273,448**	**$251,088**
CAPITALIZATION RATIOS						
Mortgage Bonds	35.6%	36.1%	36.2%	37.1%	38.1%	39.5%
Other Long-Term Debt	12.6	11.9	12.0	11.1	10.3	9.8
Total Long-Term Debt	**48.2**	**48.0**	**48.2**	**48.2**	**48.4**	**49.3**
Preferred Stock	8.2	8.7	9.9	10.2	10.8	11.4
Common Capital Stock Equity	43.6	43.3	41.9	41.6	40.8	39.3
Total Capitalization	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note: *Total may not equal sum of components due to independent rounding*

**Includes Premium on Common and Preferred Stock*

TABLE 75

PUBLIC UTILITY LONG-TERM FINANCING INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR, TYPE OF ISSUE, PURPOSE AND TYPE OF UTILITY
1982-1987—THOUSANDS OF DOLLARS

	1987	1986	1985	1984	1983	1982
ELECTRIC UTILITIES						
LONG-TERM DEBT						
New Capital	$ 8,687,727	$10,344,120	$ 9,188,802	$ 9,360,990	$ 6,831,791	$ 8,438,375
Refunding	5,238,655	11,047,010	3,328,435	812,500	751,064	786,195
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**13,926,382**	**21,391,130**	**12,517,237**	**10,173,490**	**7,582,855**	**9,224,570**
PREFERRED STOCK						
New Capital	1,205,000	985,000	655,000	888,000	1,902,750	2,096,830
Refunding	753,000	695,600	–	–	–	40,000
Divestment	–	–	–	–	–	–
Total Preferred	**1,958,000**	**1,680,600**	**655,000**	**888,000**	**1,902,750**	**2,136,830**
COMMON STOCK						
New Capital	245,750	605,945	1,578,763	861,633	3,082,855	5,003,687
Refunding	–	33,750	71,250	68,500	–	21,103
Divestment	–	–	–	–	–	–
Total Common	**245,750**	**639,695**	**1,650,013**	**930,133**	**3,082,855**	**5,024,790**
TOTAL CAPITAL						
New Capital	10,138,477	11,935,065	11,422,565	11,110,623	11,817,396	15,538,892
Refunding	5,991,655	11,776,360	3,399,685	881,000	751,064	847,298
Divestment	–	–	–	–	–	–
Total Capital	**$16,130,132**	**$23,711,425**	**$14,822,250**	**$11,991,623**	**$12,568,460**	**$16,386,190**
GAS UTILITIES*						
LONG-TERM DEBT						
New Capital	$ 2,875,301	$ 2,768,600	$ 1,382,240	$ 755,000	$ 1,210,020	$ 1,897,096
Refunding	392,659	1,111,900	203,510	50,000	110,480	17,904
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**3,267,960**	**3,880,500**	**1,585,750**	**805,000**	**1,320,500**	**1,915,000**
PREFERRED STOCK						
New Capital	251,125	–	–	100,000	240,000	357,000
Refunding	155,000	–	100,000	–	–	–
Divestment	–	–	–	–	–	–
Total Preferred	**406,125**	–	**100,000**	**100,000**	**240,000**	**357,000**
COMMON STOCK						
New Capital	93,744	224,269	44,375	78,263	364,739	40,025
Refunding	14,000	–	–	16,591	32,975	–
Divestment	–	–	–	–	–	–
Total Common	**107,744**	**224,269**	**44,375**	**94,854**	**397,714**	**40,025**
TOTAL CAPITAL						
New Capital	3,220,170	2,992,869	1,426,615	933,263	1,814,759	2,294,121
Refunding	561,659	1,111,900	303,510	66,591	143,455	17,904
Divestment	–	–	–	–	–	–
Total Capital	**$ 3,781,829**	**$ 4,104,769**	**$ 1,730,125**	**$ 999,854**	**$ 1,958,214**	**$ 2,312,025**
ALL OTHER UTILITIES†						
LONG-TERM DEBT						
New Capital	$ 1,057,246	$ 1,375,618	$ 851,750	$ 150,000	$ 1,131,055	$ 495,000
Refunding	365,000	7,950,382	2,560,000	310,000	383,445	–
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**1,422,246**	**9,326,000**	**3,411,750**	**460,000**	**1,514,500**	**495,000**
PREFERRED STOCK						
New Capital	–	–	–	–	–	40,000
Refunding	–	–	–	–	–	–
Divestment	–	–	–	–	–	–
Total Preferred	–	–	–	–	–	**40,000**
COMMON STOCK						
New Capital	4,840	101,086	475,100	–	1,093,504	1,558,876
Refunding	–	–	–	–	–	–
Divestment	–	–	–	–	–	–
Total Common	**4,840**	**101,086**	**475,100**	–	**1,093,504**	**1,558,876**
TOTAL CAPITAL						
New Capital	1,062,086	1,476,704	1,326,850	150,000	2,224,559	2,093,876
Refunding	365,000	7,950,382	2,560,000	310,000	383,445	–
Divestment	–	–	–	–	–	–
Total Capital	**$ 1,427,086**	**$ 9,427,086**	**$ 3,886,850**	**$ 460,000**	**$ 2,608,004**	**$ 2,093,876**
TOTAL UTILITY FINANCING						
LONG-TERM DEBT						
New Capital	$12,620,274	$14,488,338	$11,422,792	$10,265,990	$ 9,172,866	$10,830,471
Refunding	5,996,314	20,109,292	6,091,945	1,172,500	1,244,989	804,099
Divestment	–	–	–	–	–	–
Total Long-Term Debt	**18,616,588**	**34,597,630**	**17,514,737**	**11,438,490**	**10,417,855**	**11,634,570**
PREFERRED STOCK						
New Capital	1,456,125	985,000	655,000	988,000	2,142,750	2,493,830
Refunding	908,000	695,600	100,000	–	–	40,000
Divestment	–	–	–	–	–	–
Total Preferred	**2,364,125**	**1,680,600**	**755,000**	**988,000**	**2,142,750**	**2,533,830**
COMMON STOCK						
New Capital	344,334	931,300	2,098,238	939,896	4,541,098	6,602,588
Refunding	14,000	33,750	71,250	85,091	32,975	21,103
Divestment	–	–	–	–	–	–
Total Common	**358,334**	**965,050**	**2,169,488**	**1,024,987**	**4,574,073**	**6,623,691**
TOTAL CAPITAL						
New Capital	14,420,733	16,404,638	14,176,030	12,193,886	15,856,714	19,926,889
Refunding	6,918,314	20,838,642	6,263,195	1,257,591	1,277,964	865,202
Divestment	–	–	–	–	–	–
Total Capital	**$21,339,047**	**$37,243,280**	**$20,439,225**	**$13,461,477**	**$17,134,678**	**$20,792,091**

Classification as to type of utility is based upon predominant source of revenue. **Includes gas pipe line companies.*

†"Other Utilities" are water, transit, telephone and telegraph, and does not include railroads.

Note: Includes negotiated sales of pollution control bonds: 1987, $1,970 million; 1986, $1,570 million; 1985, $6,071 million; 1984, $4,400 million; 1983, $1,652 million; and 1982, $1,727 million.

Source: Ebasco Business Consulting Company.

TABLE 76

WEIGHTED AVERAGE OF YIELDS ON NEWLY ISSUED DOMESTIC BONDS AND PREFERRED STOCKS

1967-1987

	Utility Bonds					Preferred Stocks
Year	Electric and Gas	Telephone	Water Works	All Utilities	Industrial Bonds	All Utilities
1987	**9.74%**	**9.63%**	....	**9.75%**	**9.29%**	**7.83%**
1986	9.61	8.96	....	9.45	9.38	8.26
1985	11.83	11.54	11.18%	11.78	11.64	10.08
1984	14.25	12.73	....	13.33	12.58	13.16
1983	12.70	11.72	....	12.53	11.50	12.06
1982	14.93	14.23	....	14.56	13.65	14.42
1981	16.31	15.45	....	16.30	15.16	15.11
1980	13.46	12.59	....	13.09	11.66	12.28
1979	10.85	10.29	....	10.64	9.49	9.76
1978	9.30	9.07	....	9.22	8.98	9.03
1977	8.43	8.21	....	8.38	8.15	8.43
1976	8.92	8.41	....	8.80	8.61	9.12
1975	9.97	9.27	....	9.76	9.12	10.63
1974	9.59	9.22	....	9.21	8.87	9.95
1973	7.91	7.87	....	7.88	7.86	7.50
1972	7.50	7.36	....	7.46	7.51	7.53
1971	7.72	7.58	....	7.71	7.80	7.74
1970	8.79	8.75	....	8.85	8.86	9.01
1969	7.98	8.00	....	7.99	7.84	7.75
1968	6.80	6.55	7.17	6.72	6.64	6.44
1967	6.07	5.77	6.04	6.01	5.79	6.03

Source: Moody's Investors Service.

TABLE 77

MOODY'S AVERAGE YIELDS ON UTILITY BONDS AND STOCKS

BY MOODY'S BOND RATINGS AND STOCK QUALITY GROUPS
1977-1987

	BONDS					PREFERRED STOCKS			COMMON STOCKS					
		Rating							High Quality		Good Quality		Medium Quality	
End of Month	Over-all* Average	Aaa**	Aa	A	Baa	aa High Quality	a Good Quality	baa Medium Quality	Yield	E/P Ratio†	Yield	E/P Ratio†	Yield	E/P Ratio†
1987														
December	10.91%	10.55%	10.65%	10.94%	11.49%	9.35%	10.24%	10.45%	6.68%	10.38%	8.60%	9.60%	9.54%	12.06%
September	11.22	10.75	10.84	11.42	11.87	9.40	10.19	10.47	6.28	10.06	7.97	9.55	8.60	12.06
June	9.86	9.39	9.55	10.02	10.46	8.66	9.13	9.75	6.23	9.58	7.81	10.03	8.57	11.14
March	8.89	8.38	8.77	9.04	9.38	7.82	8.36	8.90	6.00	9.24	6.99	8.94	7.89	10.94
1986														
December	9.00	8.46	8.85	9.14	9.54	7.98	8.64	9.27	5.48	7.53	6.91	9.28	7.96	10.92
September	9.39	8.88	9.26	9.48	9.95	8.09	8.76	9.36	5.49	7.46	6.97	9.55	8.15	11.48
June	9.16	8.67	9.05	9.23	9.70	8.54	9.32	9.89	5.57	7.55	7.23	9.64	8.24	11.21
March	8.93	8.30	8.75	9.06	9.60	8.61	9.05	9.78	6.07	8.32	7.16	9.84	9.01	11.17
1985														
December	10.56	9.99	10.30	10.75	11.19	10.00	10.28	11.09	7.34	11.66	8.40	11.67	9.60	13.57
September	11.95	11.29	11.73	12.07	12.69	10.60	11.05	12.52	8.36	13.30	9.74	13.66	10.88	15.63
June	11.93	11.16	11.60	12.16	12.81	10.25	10.83	11.97	7.46	11.83	8.59	12.22	9.48	13.78
March	13.59	12.90	13.45	13.86	14.13	11.62	12.32	12.98	8.13	13.32	9.15	13.33	10.48	15.12
1984														
December	12.96	12.54	12.79	13.02	13.49	12.25	12.97	13.71	8.26	14.10	9.65	13.73	10.96	15.60
September	13.95		13.38	14.13	14.35	12.31	13.31	14.28	8.64	14.86	10.43	14.48	11.90	16.97
June	15.32		14.96	15.25	15.76	13.28	14.22	14.85	9.85	17.01	11.51	15.88	13.34	18.84
March	14.16		13.78	14.04	14.66	12.40	13.12	13.55	9.65	16.89	11.37	15.64	12.81	18.77
1983														
December	13.46	12.96	13.15	13.50	14.22	12.18	12.61	13.34	8.83	15.32	10.43	13.95	11.97	17.04
September	13.20	12.66	12.87	13.27	13.98	11.70	12.15	12.72	9.03	15.26	10.17	14.00	10.86	14.94
June	13.13	12.32	12.63	13.54	14.04	11.34	12.05	12.47	9.37	15.11	10.75	14.29	10.84	14.29
March	13.26	12.23	12.66	13.82	14.34	11.17	11.79	12.51	9.35	14.77	10.19	14.14	11.13	14.41
1982														
December	13.50	12.30	12.68	14.37	14.65	11.63	12.20	13.26	9.22	15.20	10.56	14.77	11.43	14.79
September	14.39	12.97	13.76	15.31	15.52	12.84	13.49	14.11	9.64	15.91	11.30	15.78	12.15	16.17
June	16.37	15.55	16.04	16.56	17.32	14.30	14.69	15.67	10.08	14.13	11.96	15.95	13.03	17.33
March	16.19	15.15	15.62	16.64	17.35	14.44	14.81	15.48	10.09	16.74	11.53	15.96	12.74	16.72
1981														
December	16.23	14.88	15.90	16.68	17.45	14.97	15.47	15.83	11.01	16.19	11.72	14.43	13.53	17.58
September	17.56	16.74	17.43	17.84	18.21	14.68	15.28	16.01	11.52	16.74	12.01	14.73	13.96	18.07
June	15.49	14.47	15.06	15.84	16.60	13.75	14.15	15.02	10.94	15.78	11.70	14.05	12.88	16.95
March	14.86	13.96	14.61	15.17	15.69	13.35	13.72	14.57	11.71	16.51	12.20	15.21	13.30	17.63
1980														
December	14.11	13.18	13.91	14.14	15.20	13.15	14.01	14.56	11.49	15.65	12.36	16.86	13.27	17.01
September	13.68	12.91	13.49	13.74	14.58	12.02	12.92	13.76	11.37	15.46	11.83	16.01	12.77	15.71
June	12.04	11.30	11.84	12.22	12.81	10.59	10.97	12.05	10.24	13.41	10.65	14.36	11.52	13.22
March	14.57	13.35	14.57	14.96	15.41	13.09	14.74	15.22	12.15	15.50	12.52	18.27	13.93	19.11
1979														
December	11.85	11.09	11.62	11.97	12.71	10.86	11.49	12.75	10.57	15.89	11.00	15.61	12.23	14.86
September	10.39	9.75	10.10	10.62	11.08	9.60	10.34	10.97	9.81	14.82	10.37	15.29	10.92	13.71
June	9.90	9.39	9.73	10.04	10.45	9.03	9.55	10.49	9.18	13.87	9.83	14.24	10.31	12.93
March	10.02	9.60	9.90	10.06	10.51	9.10	9.63	10.33	9.13	13.73	9.66	14.16	10.04	13.04
1978														
December	9.82	9.47	9.65	9.84	10.31	8.94	9.65	10.48	9.38	13.19	9.89	13.89	10.01	12.77
September	9.23	8.91	9.15	9.29	9.57	8.43	8.82	9.62	8.37	11.80	8.88	12.82	9.15	11.99
June	9.36	8.99	9.24	9.46	9.73	8.84	9.39	9.81	8.35	11.87	8.95	12.74	9.20	12.41
March	8.97	8.61	8.80	8.99	9.47	8.35	8.79	9.24	8.35	12.46	8.82	12.66	8.86	11.39
1977														
December	8.75	8.39	8.63	8.77	9.21	8.14	8.59	9.03	7.55	12.32	8.04	12.30	8.43	11.27
September	8.47	8.12	8.37	8.48	8.89	7.95	8.32	8.87	7.29	12.49	7.83	11.96	8.25	11.84
June	8.46	8.07	8.29	8.52	8.97	8.03	8.47	8.92	7.23	12.34	7.57	11.45	8.23	11.86
March	8.70	8.26	8.55	8.77	9.22	8.21	8.75	9.01	7.32	13.01	7.74	12.04	8.68	12.77

Note: Yields shown under preferred stocks and common stocks represent averages of ten companies in each quality group.

**Average yield for 40 utility bonds, ten in each of the four top quality ratings shown.*

***The Aaa public utility average was suspended January 17, 1984, because of a lack of appropriate issues and reinstated on October 12. The 1984 high and low for the Average Utility and the Aaa Utility, were determined when a Aaa Utility was available.*

† Ratio in percent is obtained by dividing earnings per share by market price per share.

Source: Moody's Investors Service.

TABLE 78

MOODY'S 24 UTILITY COMMON STOCKS END-OF-MONTH AVERAGES

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
MARKET PRICE—WEIGHTED AVERAGE—$ PER SHARE													
1988	...	**102.86**	**100.38**	**95.22**	**91.65**	**95.42**	**96.88**	**96.51**	**96.27**	**98.81**	**101.32**	...	...
1987	106.26	123.06	118.35	113.48	107.10r	103.30r	105.83	102.44	105.66	102.59	98.39	96.30	94.24
1986	111.11	97.44	106.11	109.01	102.23	104.88	109.23	117.40	125.66	112.15	117.57	117.99	113.66
1985	87.08	80.47	81.05	83.66	85.91	89.32	92.81	87.22	89.43	83.59	88.10	90.39	94.98
1984	71.16	71.08	68.08	66.74	65.95	66.09	66.49	68.12	70.45	74.77	77.05	78.99	80.16
1983	74.04	72.53	73.59	73.79	75.39	75.35	71.73	72.19	72.50	74.88	78.18	76.37	72.03
DIVIDEND RATE—WEIGHTED AVERAGE—$ PER SHARE													
1988	...	**9.17**	**9.17**	**8.95**	**8.98**	**8.99**	**9.03**	**8.69**	**8.69**	**8.69**	**8.69**	...	...
1987	9.12	9.09	9.09	9.09	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	9.12
1986	8.89	8.80	8.80	8.80	8.84	8.89	8.89	8.94	8.94	8.94	8.95	8.96	8.97
1985	8.61	8.44	8.46	8.48	8.52	8.61	8.66	8.66	8.66	8.69	8.69	8.70	8.71
1984	8.26	8.11	8.12	8.14	8.17	8.25	8.30	8.31	8.34	8.34	8.34	8.35	8.37
1983	7.87	7.73	7.75	7.76	7.80	7.86	7.86	7.87	7.87	7.97	7.97	7.98	8.00
YIELD—%													
1988	...	**8.92**	**9.14**	**9.40**	**9.80**	**9.42**	**9.32**	**9.00**	**9.03**	**8.79**	**8.58**	...	...
1987	8.58	7.39	7.68	8.01	8.50	8.88	8.63	8.91	8.64	8.91	9.29	9.49	9.68
1986	8.00	9.03	8.29	8.07	8.65	8.48	8.14	7.61	7.11	7.97	7.61	7.59	7.89
1985	9.89	10.49	10.44	10.14	9.92	9.64	9.33	9.93	9.68	10.40	9.86	9.62	9.17
1984	11.61	11.41	11.93	12.20	12.39	12.48	12.48	12.20	11.84	11.15	10.82	10.57	10.44
1983	10.63	10.66	10.53	10.52	10.35	10.43	10.96	10.90	10.86	10.64	10.19	10.45	11.11

EARNINGS—WEIGHTED AVERAGE—$ PER SHARE

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1988	...	...	...	...
1987	12.86	12.63	12.36	11.45
1986	12.40	12.72	13.17	13.13
1985	12.66	12.65	12.67	12.53
1984	12.35	12.56	12.48	12.67
1983	10.87	10.87	11.49	11.88

Note: Quarterly earnings are for the 12 months ended March 31, June 30, September 30 and December 31.

r Revised.

Source: Moody's Investors Service.

ECONOMICS AND OTHER

SECTION X

TABLE 82

CONSUMER PRICE INDEX, 1964-1987

1982-84 EQUALS 100

	All Items		Food and Beverages		Housing	
Year	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase
1987*	**113.6**	**3.6**	**113.5**	**4.0**	**114.2**	**3.0**
1986*	109.6	1.9	109.1	3.3	110.9	3.0
1985*	107.6	3.6	105.6	2.3	107.7	4.0
1984*	103.9	4.3	103.2	3.7	103.6	4.1
1983*	99.6	3.2	99.5	2.3	99.5	2.7
1982*	96.5	6.2	97.3	4.1	96.9	7.2
1981*	90.9	10.3	93.5	7.8	90.4	11.5
1980*	82.4	13.5	86.7	8.5	81.1	15.7
1979*	72.6	11.3	79.9	10.7	70.1	12.3
1978*	65.2	7.6	72.2	9.7	62.4	8.7
1977	60.6	6.5	65.8	6.0	57.4	6.7
1976	56.9	5.8	62.1	3.2	53.8	6.1
1975	53.8	9.1	60.2	8.5	50.7	10.7
1974	49.3	11.0	55.5	13.7	45.8	11.2
1973	44.4	6.2	48.8	13.2	41.2	4.6
1972	41.8	3.2	43.1	4.1	39.4	3.7
1971	40.5	4.4	41.4	3.2	38.0	4.4
1970	38.8	5.7	40.1	5.2	36.4	7.1
1969	36.7	5.5	38.1	5.2	34.0	6.3
1968	34.8	4.2	36.2	3.4	32.0	3.9
1967	33.4	3.1	35.0	—	30.8	—
1966	32.4	2.9	—	—	—	—
1965	31.5	1.6	—	—	—	—
1964	31.0	1.3	—	—	—	—

	Transportation		Gas and Electricity		Electricity	
Year	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase
1987*	**105.4**	**3.0**	**103.8**	**(1.8)**	**110.0**	**(0.4)**
1986*	102.3	(3.9)	105.7	(1.3)	110.4	1.4
1985*	106.4	2.6	107.1	1.6	108.9	3.4
1984*	103.7	4.4	105.4	3.8	105.3	6.5
1983*	99.3	2.4	101.5	8.9	98.9	3.2
1982*	97.0	4.1	93.2	13.8	95.8	9.9
1981*	93.2	12.2	81.9	14.7	87.2	15.0
1980*	83.1	17.9	71.4	17.0	75.8	15.5
1979*	70.5	14.3	61.0	10.9	65.6	7.7
1978*	61.7	4.6	55.0	8.9	60.9	7.6
1977	59.0	7.1	50.5	13.0	56.6	6.6
1976	55.1	10.0	44.7	11.5	53.1	6.2
1975	50.1	9.4	40.1	16.2	50.0	13.4
1974	45.8	11.2	34.5	15.4	44.1	17.9
1973	41.2	3.3	29.9	4.9	37.4	5.1
1972	39.9	1.0	28.5	5.2	35.6	5.0
1971	39.5	5.3	27.1	6.7	33.9	6.6
1970	37.5	5.0	25.4	4.5	31.8	3.2
1969	35.7	4.1	24.3	1.7	30.8	2.0
1968	34.3	3.0	23.9	0.8	30.2	1.0
1967	33.3	3.1	23.7	0.4	29.9	0.7
1966	32.3	1.3	23.6	0.4	29.7	0.0
1965	31.9	1.6	23.5	0.0	29.7	(0.3)
1964	31.4	1.6	23.5	0.0	29.8	(0.3)

**Data beginning 1978 are for All Urban Consumers; earlier data are for Urban Wage Earners and Clerical Workers.*

Source: U.S. Department of Labor. Bureau of Labor Statistics. CPI Detailed Report *and* Monthly Labor Review.

TABLE 83

RESIDENTIAL ELECTRICITY AND CONSUMER PRICE INDEX
TOTAL ELECTRIC UTILITY INDUSTRY

Year	Average Revenue per Residential kWh Used	Average Rate per kWh Based on Average of Typical Bills in Cities* Price per kWh for Monthly Use of:					U.S. Bureau of Labor Statistics Index Numbers Based on 1982-84 = 100†	
		100 kWh	250 kWh	500 kWh	750 kWh	1,000 kWh	Electricity	Consumer Price Index
		(Energy Information Administration)						
1987	**7.45¢p**	....	....	....	....	....	**110.0**	**113.6**
1986	7.43¢r	....	8.89¢	8.18¢	7.57¢	7.46¢	110.4	109.6
1985	7.39	....	9.19	8.51	7.84	7.75	108.9	107.6
1984	7.17	....	9.04	8.37	7.71	7.64	105.3	103.9
1983	6.83	....	8.63	8.04	7.30	7.28	98.9	99.6
1982	6.44	....	8.29	7.67	7.03	7.00	95.8	96.5
1981	5.86	....	7.93	7.39	6.68	6.64	87.2	90.9
1980	5.12	....	7.10	6.52	5.87	5.82	75.8	82.4
1979	4.43	....	6.11	5.56	4.92	4.87	65.6	72.6
1978	4.03	7.10¢	5.54	4.61	4.36	4.31	60.9	65.2
1977	3.78	6.87	5.39	4.44	4.16	4.10	56.6	60.6
1976	3.45	6.54	5.14	4.17	3.90	3.82	53.1	56.9
1975	3.21	6.15	4.82	3.85	3.57	3.49	50.0	53.8
1974	2.83	5.89	4.60	3.59	3.30	3.23	44.1	49.3
1973	2.38	4.99	3.79	2.82	2.55	2.49	37.4	44.4
1972	2.29	4.65	3.47	2.51	2.26	2.19	35.6	41.8
1971	2.19	4.51	3.34	2.40	2.15	2.07	33.9	40.5
1970	2.10	4.25	3.14	2.23	2.00	1.92	31.8	38.8
1969	2.09	4.09	3.00	2.10	1.90	1.83	30.8	36.7
1968	2.12	4.05	2.96	2.06	1.86	1.80	30.2	34.8
1967	2.17	4.03	2.95	2.07	1.89	1.83	29.9	33.4

*As determined by the Energy Information Administration in its "Typical Electric Bills." The figures cover rate schedules as of December 31 in all cities with populations of 2,500 or more.

† Data beginning 1978 are for All Urban Consumers; earlier data are for Urban Wage Earners and Clerical Workers.

p Preliminary. r Revised.

TABLE 84

PRODUCER PRICE INDEX— ALL ITEMS AND SELECTED INDUSTRIAL COMMODITIES

1982-84 EQUALS 100

	All Items		Metals and Metal Products		Machinery and Equipment		Furniture and Household Durables		Fuels and Related Products and Power	
Year	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase
1987	**102.8**	**2.6**	**107.1**	**3.8**	**110.4**	**1.5**	**109.9**	**1.6**	**70.2**	**0.6**
1986	100.2	(2.9)	103.2	(1.1)	108.8	1.5	108.2	1.0	69.8	(23.6)
1985	103.2	(0.5)	104.4	(0.4)	107.2	2.0	107.1	1.3	91.4	(3.6)
1984	103.7	2.4	104.8	2.9	105.1	2.3	105.7	2.2	94.8	(1.1)
1983	101.3	1.3	101.8	1.8	102.7	2.7	103.4	3.4	95.9	(4.1)
1982	100.0	2.0	100.0	0.4	100.0	5.9	100.0	4.3	100.0	(0.2)
1981	98.0	9.1	99.6	4.8	94.4	9.8	95.9	5.7	100.2	21.0
1980	89.8	14.1	95.0	10.5	86.0	12.1	90.7	9.5	82.8	40.6
1979	78.7	12.6	86.0	14.2	76.7	9.1	82.8	6.8	58.9	26.7
1978	69.9	7.7	75.3	8.7	70.3	7.8	77.5	5.9	46.5	6.7
1977	64.9	6.2	69.3	6.6	65.2	6.4	73.2	4.1	43.6	13.8
1976	61.1	4.6	65.0	5.7	61.3	5.9	70.3	4.1	38.3	8.2
1975	58.4	9.2	61.5	7.9	57.9	15.8	67.5	9.2	35.4	17.6
1974	53.5	18.9	57.0	29.5	50.0	14.4	61.8	11.0	30.1	55.2
1973	45.0	13.1	44.0	7.6	43.7	3.3	55.7	3.5	19.4	13.5
1972	39.8	4.5	40.9	3.8	42.3	2.2	53.8	1.3	17.1	3.0
1971	38.1	3.3	39.4	1.8	41.4	3.5	53.1	2.3	16.6	8.5
1970	36.9	3.7	38.7	7.5	40.0	4.7	51.9	2.4	15.3	4.8
1969	35.6	4.1	36.0	5.9	38.2	3.2	50.7	2.0	14.6	2.1
1968	34.2	2.4	34.0	2.4	37.0	3.1	49.7	2.9	14.3	(0.7)
1967	33.4	—	33.2	—	35.9	—	48.3	—	14.4	—

	Coal		Gas Fuels		Electric Power		Crude Petroleum		Petroleum Products, Refined	
Year	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase	Index	Percent Increase
1987	**97.1**	**(3.7)**	**74.1**	**(10.9)**	**110.6**	**(1.8)**	**55.5**	**18.3**	**56.8**	**6.8**
1986	100.8	(1.4)	83.2	(15.7)	112.6	0.9	46.9	(44.5)	53.2	(36.1)
1985	102.2	0.0	98.7	(5.6)	111.6	3.1	84.5	(7.4)	83.2	(4.8)
1984	102.2	1.7	104.5	(3.3)	108.2	5.3	91.3	(1.7)	87.4	(2.8)
1983	100.5	0.5	108.1	8.1	102.8	2.8	92.9	(7.1)	89.9	(10.1)
1982	100.0	7.5	100.0	12.9	100.0	10.7	100.0	(8.8)	100.0	(5.6)
1981	93.0	6.4	88.6	23.6	90.3	14.2	109.6	44.4	105.9	19.5
1980	87.4	3.7	71.7	39.8	79.1	18.9	75.9	48.0	88.6	51.7
1979	84.3	4.9	51.3	27.0	66.5	8.0	51.3	25.4	58.4	38.4
1978	80.4	10.4	40.4	10.4	61.6	7.5	40.9	9.4	42.2	4.2
1977	72.8	5.7	36.6	35.6	57.3	12.1	37.4	8.1	40.5	11.6
1976	68.9	(4.6)	27.0	32.4	51.1	7.4	34.6	3.3	36.3	7.4
1975	72.2	16.1	20.4	33.3	47.6	18.7	33.5	15.9	33.8	15.4
1974	62.2	52.5	15.3	28.6	40.1	26.1	28.9	68.0	29.3	73.4
1973	40.8	12.7	11.9	10.2	31.8	6.4	17.2	11.0	16.9	18.2
1972	36.2	6.5	10.8	5.9	29.9	4.5	15.5	(0.6)	14.3	1.4
1971	34.0	21.0	10.2	4.1	28.6	9.6	15.6	7.6	14.1	6.0
1970	28.1	33.2	9.8	11.4	26.1	4.4	14.5	1.4	13.3	1.5
1969	21.1	8.8	8.8	1.1	25.0	0.8	14.3	4.4	13.1	1.6
1968	19.4	3.7	8.7	(7.4)	24.8	0.8	13.7	0.7	12.9	(1.5)
1967	18.7	—	9.4	—	24.6	—	13.6	—	13.1	—

Source: U.S. Department of Labor. Bureau of Labor Statistics. Producer Price Indexes.

TABLE 85

COST TRENDS OF ELECTRIC LIGHT AND POWER CONSTRUCTION*

BY GEOGRAPHIC DIVISIONS—1967-1988

1973 EQUALS 100

Date	North Atlantic	South Atlantic	North Central	South Central	Plateau	Pacific
Jan. 1, 1988	260	253	261	257	258	271
July 1, 1987	251	244	253	250	249	262
Jan. 1, 1987	249	242	250	249	248	259
July 1, 1986	249	243	250	249	249	260
Jan. 1, 1986	246	241	247	249	247	260
July 1, 1985	244	240	245	247	247	258
Jan. 1, 1985	243	241	245	249	248	258
July 1, 1984	239	237	241	246	248	259
Jan. 1, 1984	233	233	236	243	244	255
July 1, 1983	231	233	236	242	245	254
Jan. 1, 1983	226	230	231	239	240	250
July 1, 1982	222	227	229	234	236	247
Jan. 1, 1982	218	222	226	231	232	240
July 1, 1981	209	218	215	222	222	230
Jan. 1, 1981	203	210	208	214	216	225
July 1, 1980	193	197	196	203	202	209
Jan. 1, 1980	186	191	190	195	197	200
July 1, 1979	178	182	181	187	188	192
Jan. 1, 1979	168	174	173	178	179	181
July 1, 1978	161	165	165	169	170	173
Jan. 1, 1978	156	161	159	164	166	168
July 1, 1977	154	158	157	162	163	165
Jan. 1, 1977	147	152	149	155	155	157
July 1, 1976	145	148	146	151	152	151
Jan. 1, 1976	140	144	141	146	145	146
July 1, 1975	138	140	140	142	143	141
Jan. 1, 1975	130	133	132	134	133	132
July 1, 1974	119	120	120	122	120	120
Jan. 1, 1974	105	105	104	105	105	105
July 1, 1973	100	100	100	100	100	100
Jan. 1, 1973	95	96	96	95	96	96
July 1, 1972	93	94	94	93	94	94
Jan. 1, 1972	92	91	94	91	92	93
July 1, 1971	87	88	90	88	89	89
Jan. 1, 1971	83	84	86	85	85	85
July 1, 1970	80	81	83	83	82	82
Jan. 1, 1970	77	79	80	80	80	80
July 1, 1969	74	76	77	77	77	77
Jan. 1, 1969	72	73	74	74	74	74
July 1, 1968	71	71	72	73	73	73
Jan. 1, 1968	69	70	71	72	72	72
July 1, 1967	68	68	69	70	70	71
Jan. 1, 1967	67	67	67	68	68	69

** Index numbers shown are a composite of over 50 material and labor items included in the Handy-Whitman Index service of cost indexes of construction and equipment, all steam.*

Source: Handy-Whitman Index of Public Utility Construction Costs. Published by courtesy of Whitman, Requardt and Associates, Baltimore, Maryland.

TABLE 86

COST OF INDUSTRIAL PURCHASED ELECTRIC POWER AS A PERCENT OF VALUE OF PRODUCT SHIPMENT

U.S. AVERAGE 1981—1986

Standard Industrial Classification	Industry	1986	1985	1984	1983	1982	1981
20	Food and Kindred Products	0.9	0.9	0.9	0.9	0.8	0.8
21	Tobacco Manufacturers	0.4	0.4	0.4	0.4	0.4	0.4
22	Textile Mill Products	2.3	2.3	2.3	2.2	2.2	1.9
23	Apparel and Other Textile Products	0.7	0.7	0.7	0.7	0.7	0.7
24	Lumber and Wood Products	1.5	1.5	1.5	1.4	1.5	1.3
25	Furniture and Fixtures	0.9	0.9	0.9	0.9	0.9	0.9
26	Paper and Allied Products	3.9	4.1	3.9	4.1	3.8	3.6
27	Printing and Publishing	0.7	0.7	0.8	0.7	0.7	0.7
28	Chemicals and Allied Products	2.9	3.1r	3.1	3.0	3.3	3.0
29	Petroleum and Coal Products	1.6	1.1r	1.1	1.0	0.8	0.7
30	Rubber and Miscellaneous Plastics Products	2.1	2.1	2.0	2.1	2.1	2.0
31	Leather and Leather Products	0.8	0.8	0.8	0.8	0.7	0.7
32	Stone, Clay and Glass Products	2.8	2.9	2.9	2.9	2.9	2.7
33	Primary Metal Industries	4.5	4.7r	4.8	4.6	4.6	3.8
34	Fabricated Metal Products	1.2	1.2	1.3	1.2	1.2	1.1
35	Machinery, Except Electrical	0.9	0.9	0.9	0.9	0.9	0.8
36	Electric and Electronic Equipment	1.0	1.0	1.0	1.0	1.0	1.0
37	Transportation Equipment	0.6	0.6	0.6	0.7	0.7	0.7
38	Instruments and Related Products	0.7	0.8	0.8	0.8	0.7	0.7
39	Miscellaneous Manufacturing Industries	0.8	0.8	0.9	0.9	0.8	0.8
	Total Manufacturing	1.5	1.5	1.5	1.5	1.5	1.4

r Revised.

Source: U.S. Department of Commerce. Bureau of the Census. Annual Survey of Manufactures. Statistics for Industry Groups and Industries.

TABLE 87

WEIGHTED AVERAGE ELECTRIC BILLS (DOLLARS)

BY CENSUS DIVISION AND CERTAIN CLASS OF SERVICE

1986 – 1987

Residential Service

	January 1, 1987					January 1, 1986				
Division	250 kWh	500 kWh	750 kWh	1,000 kWh	2,500 kWh	250 kWh	500 kWh	750 kWh	1,000 kWh	2,500 kWh
New England	$24.52	$44.72	$61.90	$81.93	$191.35	$25.64	$47.48	$65.36	$86.94	$204.12
Middle Atlantic	29.42	51.41	68.67	90.79	203.97	31.43	56.95	74.63	99.36	229.84
East North Central	23.21	41.38	55.55	71.62	151.11	23.27	41.69	56.19	72.10	153.97
West North Central	19.87	36.54	50.55	65.22	135.63	20.04	37.00	50.99	66.14	136.06
South Atlantic	21.66	38.28	53.54	69.29	160.11	22.69	40.23	56.46	73.20	169.98
East South Central	18.69	33.07	45.98	58.55	133.84	18.20	32.17	44.58	56.94	129.27
West South Central	20.52	37.05	51.43	65.52	135.38	21.36	38.88	54.30	69.35	147.31
Mountain	20.97	37.87	54.23	70.12	162.51	21.33	38.20	54.51	70.24	161.93
Pacific	16.64	37.60	56.56	78.57	198.83	17.01	37.43	55.96	78.83	198.95
Alaska & Hawaii	23.98	42.11	60.09	78.13	186.30	27.88	49.97	71.94	93.96	226.09
U.S. Average	$22.22	$40.88	$56.78	$74.57	$168.69	$22.97	$42.54	$58.79	$77.50	$177.21

Commercial Service

	January 1, 1987					January 1, 1986				
	12 kW	30 kW	40 kW	50 kW	100 kW	12 kW	30 kW	40 kW	50 kW	100 kW
	1,500 kWh	6,000 kWh	10,000 kWh	12,500 kWh	30,000 kWh	1,500 kWh	6,000 kWh	10,000 kWh	12,500 kWh	30,000 kWh
New England	$153.94	$572.96	$ 855.04	$1,060.32	$2,309.84	$179.91	$622.79	$ 950.72	$1,172.98	$2,596.85
Middle Atlantic	237.47	731.31	1,089.39	1,359.61	2,962.97	257.11	799.67	1,202.01	1,500.69	3,291.10
East North Central	163.56	537.92	819.27	1,041.75	2,372.88	163.01	557.41	857.90	1,065.41	2,381.70
West North Central	124.23	442.63	682.57	844.60	1,862.53	125.13	444.33	687.71	850.84	1,879.98
South Atlantic	127.73	465.86	725.17	898.11	1,965.70	132.38	484.68	755.81	936.56	2,085.33
East South Central	114.48	416.40	662.74	825.57	1,881.68	111.68	401.32	643.66	833.12	1,856.76
West South Central	127.24	428.47	671.66	831.19	1,817.98	132.30	467.30	720.82	892.05	1,965.25
Mountain	134.91	460.21	736.71	922.18	2,023.46	138.22	472.57	756.37	946.76	2,079.14
Pacific	130.99	497.08	813.81	1,010.91	2,346.06	136.37	524.91	847.30	1,055.66	2,476.67
Alaska & Hawaii	136.95	538.77	819.08	1,017.58	2,250.17	154.28	589.33	913.91	1,138.63	2,579.67
U.S. Average	$155.29	$529.65	$ 820.06	$1,023.42	$2,282.20	$162.60	$560.88	$ 869.43	$1,082.44	$2,420.85

Industrial Service

	January 1, 1987				January 1, 1986			
	150 kW	300 kW	1,000 kW	5,000 kW	150 kW	300 kW	1,000 kW	5,000 kW
	30,000 kWh	60,000 kWh	200,000 kWh	1,500,000 kWh	30,000 kWh	60,000 kWh	200,000 kWh	1,500,000 kWh
New England	$2,503	$4,912	$15,505	$102,459	$2,839	$5,375	$16,771	$112,929
Middle Atlantic	3,331	6,528	20,941	112,838	3,547	6,934	21,355	126,453
East North Central	2,823	5,490	18,489	108,053	2,697	5,217	17,721	108,512
West North Central	2,077	4,051	12,976	79,631	2,046	3,992	12,735	80,081
South Atlantic	2,248	4,463	14,557	85,583	2,335	4,643	15,146	90,604
East South Central	2,226	4,410	13,926	86,846	2,144	4,291	13,333	81,609
West South Central	2,116	4,153	13,385	79,024	2,219	4,387	13,907	88,981
Mountain	2,245	4,370	14,118	83,246	2,372	4,635	14,859	91,040
Pacific	2,474	4,878	14,993	103,544	2,580	5,125	16,273	114,384
Alaska & Hawaii	2,575	5,221	16,420	102,483	2,908	5,908	18,710	120,449
U.S. Average	$2,572	$5,046	$16,226	$ 97,463	$2,656	$5,208	$16,652	$104,910

Source: U.S. Department of Energy. Energy Information Administration. Typical Electric Bills.

TABLE 88

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE – TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND VOLTAGE GROUPS

	Circuit Miles		
Division/State	1987p	1986r	1985r
Total United States*	**616,414**	**610,585**	**603,733**
Maine	3,754	3,710	3,684
New Hampshire	2,333	2,279	2,278
Vermont	1,783	1,785	1,787
Massachusetts	6,017	5,918	5,883
Rhode Island	674	667	699
Connecticut	1,805	1,825	1,815
New England	**16,366**	**16,184**	**16,146**
New York	20,302	20,160	20,777
New Jersey	6,278	6,288	6,310
Pennsylvania	20,387	20,222	20,155
Middle Atlantic	**46,967**	**46,670**	**47,242**
Ohio	21,519	21,497	21,478
Indiana	15,006	14,970	14,812
Illinois	16,557	16,570	16,873
Michigan	18,059	18,066	18,021
Wisconsin	9,690	9,636	9,547
East North Central	**80,831**	**80,739**	**80,731**
Minnesota	10,080	10,123	10,318
Iowa	10,842	10,855	10,938
Missouri	12,144	12,138	12,075
North Dakota	7,018	7,009	7,018
South Dakota	6,929	6,884	6,850
Nebraska	13,708	13,616	13,523
Kansas	10,749	10,765	10,791
West North Central	**71,470**	**71,390**	**71,513**
Delaware	2,626	2,551	2,468
Maryland	8,654	8,616	8,682
District of Columbia	10	10	12
Virginia	12,713	12,333	12,131
West Virginia	8,226	8,174	7,458
North Carolina	23,323	23,729	23,485
South Carolina	19,955	19,674	19,337
Georgia	22,673	21,586	21,389
Florida	17,128	16,966	15,929
South Atlantic	**115,308**	**113,639**	**110,891**
Kentucky	13,056	12,845	12,815
Tennessee	28,725	28,186	25,146
Alabama	14,197	13,629	13,923
Mississippi	13,567	13,277	12,954
East South Central	**69,545**	**67,937**	**64,838**
Arkansas	7,239	7,219	7,148
Louisiana	11,875	11,636	11,553
Oklahoma	10,115	9,923	9,923
Texas	47,522	46,811	45,746
West South Central	**76,751**	**75,589**	**74,370**
Montana	10,422	10,291	10,385
Idaho	11,700	11,687	11,636
Wyoming	5,117	5,109	4,983
Colorado	7,195	7,213	7,091
New Mexico	7,230	7,156	7,071
Arizona	12,835	12,753	12,647
Utah	6,278	6,251	6,209
Nevada	5,840	5,789	5,618
Mountain	**66,617**	**66,249**	**65,640**
Washington	17,841	17,718	17,673
Oregon	11,653	11,625	11,650
California	40,942	40,727	40,929
Pacific	**70,436**	**70,070**	**70,252**
Alaska	655	652	646
Hawaii	1,468	1,466	1,464
Alaska & Hawaii	**2,123**	**2,118**	**2,110**

Nominal Voltage	Circuit Miles		
	1987p	1986r	1985r
Total	**616,414**	**610,585**	**603,733**
22,000- 30,000	87,515	85,403	80,232
31,000- 40,000	68,495	68,069	66,783
41,000- 50,000	37,291	37,200	37,825
51,000- 70,000	107,983	106,257	106,157
71,000-131,000	91,481	92,283	92,394
132,000-143,000	65,923	65,200	65,380
144,000-188,000	23,776	23,623	24,025
189,000-253,000	63,212	62,357	61,350
254,000-400,000	44,335	43,913	44,002
401,000-600,000	23,011	22,883	22,564
601,000-800,000	3,392	3,397	3,021

**Does not include the following miles of line operated by REA Cooperatives: 1987—71,804; 1986—71,302; 1985—70,800.*

p Preliminary. r Revised.

TABLE 89

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE – INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND VOLTAGE GROUPS

Division/State	Circuit Miles 1987p	Circuit Miles 1986r	Circuit Miles 1985r
Total United States	**484,863**	**482,036**	**479,545**
Maine	3,729	3,685	3,659
New Hampshire	2,333	2,279	2,278
Vermont	1,678	1,680	1,682
Massachusetts	5,885	5,794	5,768
Rhode Island	674	667	699
Connecticut	1,770	1,790	1,781
New England	**16,069**	**15,895**	**15,867**
New York	19,079	19,035	19,652
New Jersey	6,268	6,278	6,300
Pennsylvania	20,387	20,222	20,155
Middle Atlantic	**45,734**	**45,535**	**46,107**
Ohio	21,434	21,441	21,421
Indiana	14,885	14,863	14,701
Illinois	16,332	16,352	16,647
Michigan	17,879	17,993	17,948
Wisconsin	9,610	9,560	9,471
East North Central	**80,140**	**80,209**	**80,188**
Minnesota	9,726	9,769	9,964
Iowa	10,288	10,311	10,416
Missouri	10,925	10,927	10,889
North Dakota	4,997	4,988	4,997
South Dakota	3,514	3,491	3,436
Nebraska	94	94	94
Kansas	10,019	10,040	10,070
West North Central	**49,563**	**49,620**	**49,866**
Delaware	2,520	2,514	2,439
Maryland	8,651	8,613	8,679
District of Columbia	10	10	12
Virginia	11,656	11,312	11,127
West Virginia	8,226	8,174	7,458
North Carolina	22,367	22,800	22,595
South Carolina	16,435	16,225	16,045
Georgia	17,427	16,881	16,346
Florida	12,444	12,352	12,268
South Atlantic	**99,736**	**98,881**	**96,969**
Kentucky	7,931	7,915	7,895
Tennessee	246	245	243
Alabama	10,059	9,752	9,738
Mississippi	9,628	9,542	9,593
East South Central	**27,864**	**27,454**	**27,469**
Arkansas	6,624	6,675	6,569
Louisiana	11,675	11,435	11,352
Oklahoma	8,288	8,275	8,178
Texas	43,165	42,469	41,495
West South Central	**69,752**	**68,854**	**67,594**
Montana	8,013	7,882	8,029
Idaho	10,925	10,912	10,861
Wyoming	3,129	3,121	2,990
Colorado	4,658	4,677	4,553
New Mexico	7,038	6,964	6,879
Arizona	6,108	6,075	6,065
Utah	6,092	6,065	6,038
Nevada	4,664	4,612	4,580
Mountain	**50,627**	**50,308**	**49,995**
Washington	4,084	4,076	4,106
Oregon	6,141	6,157	6,185
California	33,637	33,535	33,689
Pacific	**43,862**	**43,768**	**43,980**
Alaska	48	46	46
Hawaii	1,468	1,466	1,464
Alaska & Hawaii	**1,516**	**1,512**	**1,510**

Nominal Voltage	Circuit Miles 1987p	Circuit Miles 1986r	Circuit Miles 1985r
Total	**484,863**	**482,036**	**479,545**
22,000- 30,000	55,391	54,080	52,810
31,000- 40,000	60,859	60,436	59,207
41,000- 50,000	32,834	32,760	33,014
51,000- 70,000	87,361	86,993	87,023
71,000-131,000	73,663	74,499	74,690
132,000-143,000	61,683	61,228	61,320
144,000-188,000	10,093	10,039	9,928
189,000-253,000	47,760	46,905	46,655
254,000-400,000	37,388	37,302	37,452
401,000-600,000	15,429	15,387	15,134
601,000-800,000	2,402	2,407	2,312

p Preliminary. r Revised.

TABLE 90

AVERAGE NUMBER OF EMPLOYEES INVESTOR-OWNED ELECTRIC UTILITIES

ELECTRIC DEPARTMENT

Year	Operation and Maintenance	Construction	Total
1987	**425,076**	**98,792**	**523,868**
1986r	422,693	106,971	529,664
1985	403,497	121,006	524,503
1984	395,500	120,600	516,100
1983	397,800	115,400	513,200
1982	388,400	116,700	505,100
1981	375,900	114,600	490,500
1980	368,400	108,200	476,600
1979	356,200	106,800	463,000
1978	341,500	103,000	444,500
1977	326,800	99,700	426,500
1976	317,600	99,100	416,700
1975	310,500	101,000	411,500
1974	311,700	107,400	419,100
1973	307,200	107,900	415,100
1972	299,200	102,300	401,500
1971	295,200	98,500	393,700
1970	290,200	94,700	384,900
1969	282,600	89,900	372,500
1968	279,300	86,000	365,300
1967	275,500	81,900	357,400

r Revised

GLOSSARY

Allowance for Funds Used During Construction (AFUDC): An amount recorded by a company to represent the cost of those funds used to finance construction work in progress. See Glossary of Electric Utility Terms.

Capability: The maximum load which a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time, without exceeding approved limits of temperature and stress.

Capacity: The load for which a generating unit, generating station, or other electrical apparatus is rated either by the user or by the manufacturer. See also Name Plate Rating.

Capital Expenditures: Cost of construction of new utility plant (additions, betterments, and replacements) and expenditures for the purchase or acquisition of existing utility plant facilities.

Capitalization: The total of: Long-Term Debt, Preferred Stock and Common Stock Equity. For balance sheet presentation, several modifications are sometimes made: current maturities of Long-Term Debt are not included in the Capitalization section, but Short-Term Debt (with an original maturity of less than one year) which will be refinanced by Long-Term Debt is sometimes included.

Class of Service: A group of customers with similar characteristics (i.e., residential, commercial, industrial, sales for resale, etc.) which are identified for the purpose of setting a rate for electric service.

Construction Expenditures: Expenditures (may or may not include Interest and/or Other Overheads Charged to Construction) for construction including additions to and betterments, renewals, and replacements of utility plant during a specific period, but not money spent for maintenance or for the acquisition of existing utility systems or segments.

Consumer Price Index (CPI): This index is issued by the U.S. Department of Labor, Bureau of Labor Statistics, as a measure of average changes in the retail prices of goods and services usually bought by two groups. The first group consists of the families of wage earners and clerical workers living in cities. The second group consists of all urban consumers.

Customers, Average: The arithmetic averages of month-end customers in each of 12 consecutive months. For those billed other than every month, the number of such customers is adjusted to a 12-month basis (e.g., for bimonthly billing the number of customers billed, or counted, in each month is multiplied by two and the resultant averaged for the 12-month period).

Demand: The rate at which electric energy is delivered to or by a system, part of a system, or a piece of equipment. It is expressed in kilowatts, kilovoltamperes or other suitable unit at a given instant or averaged over any designated period of time. The primary source of "Demand" is the power-consuming equipment of the customers.

Electric Generation—Net: Gross generation less kilowatthours consumed for generation station use.

Electric Utility Industry: All enterprises engaged in the production and/or distribution of electricity for use by the public, including:

Investor-Owned Electric Utilities organized as tax-paying business usually financed by the sale of securities, in the free market.

Cooperatively-Owned Utilities A group of persons who have organized a joint venture for the purpose of supplying electric energy to a specified area.

Government-Owned includes municipal systems, federal agencies, state projects, and public power districts, and, where the data are not separable, those industrial plants contributing to the public supply.

Expenses, Operating: A group of expenses applicable to utility operations composed of: Operation Expense, Maintenance Expense, Provisions for Depreciation and Amortization, Taxes Other Than Income Taxes, Income Taxes, Provisions for Deferred Income Taxes, Income Taxes Deferred in Prior Years—Credit, and Investment Tax Credit Adjustments—Net.

Fuels, Fossil: Any naturally occurring fuel of an organic nature, such as coal, crude oil, and natural gas.

Industrial Electric Power: Electric generating stations operated by Industrial establishments.

Load Factor: The ratio of the average load in kilowatts supplied during a designated period to the peak or maximum load in kilowatts occurring in that period. Load factor, in percent, also may be derived by multiplying the kilowatthours in the period by 100 and dividing by the product of the maximum demand in kilowatts and the number of hours in the period.

Margin, Percent Capacity: The difference between capability and peak load divided by the capability times 100. Should not be confused with Percent Reserve Margin in which the difference is divided by the peak load.

Name Plate Rating: The full-load continuous rating of a generator, prime mover or other electrical equipment under specified conditions as designated by the manufacturer.

Output, Weekly Electric: The sum of the system output of all investor-owned utilities, rural electric cooperatives, and government power projects in the contiguous United States adjusted for all inter-utility deliveries.

Peak Load: See Demand—The greatest demand which occurs during a specified period of time.

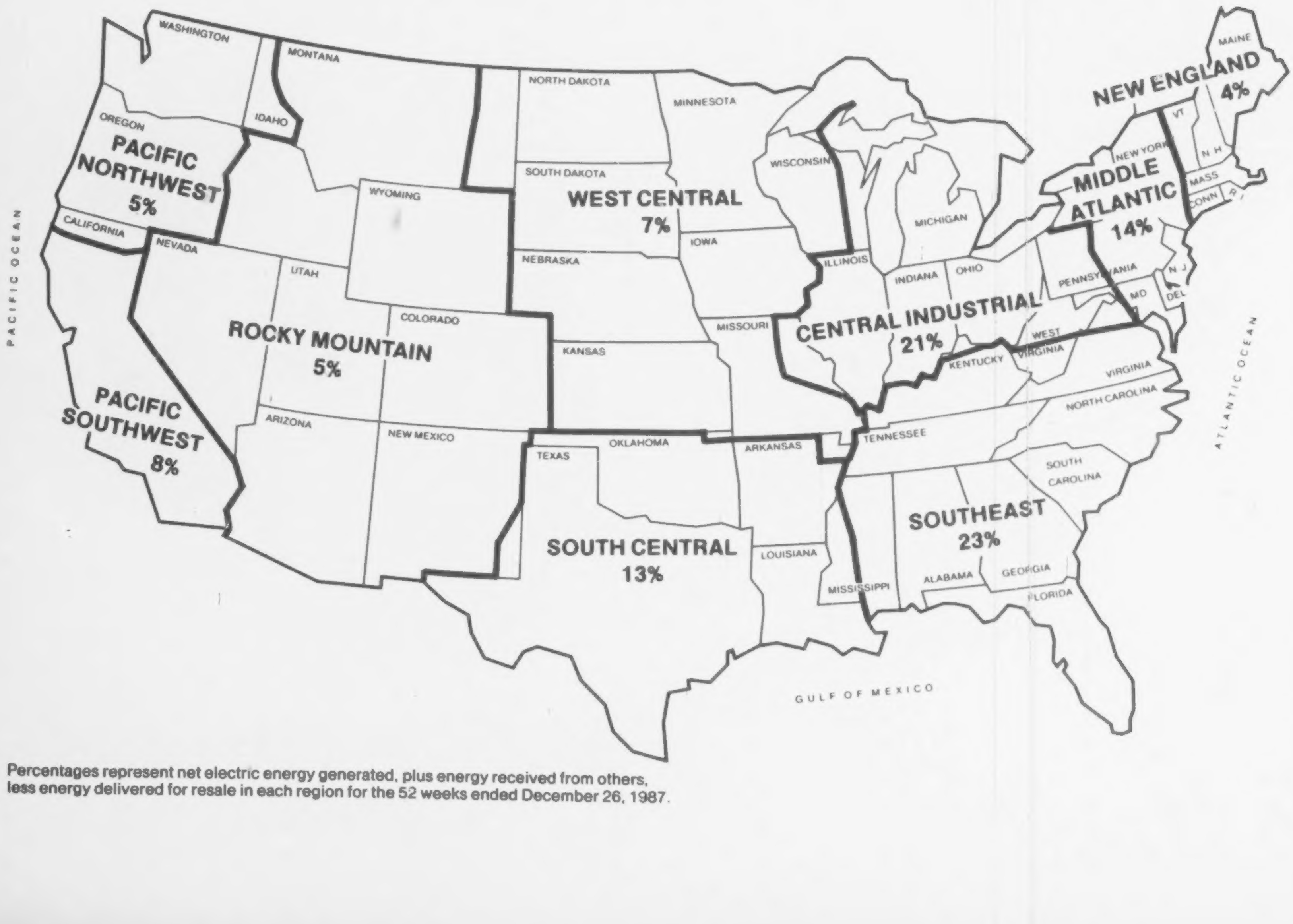
Prime Mover: The engine, turbine, water wheel, or similar machine which drives an electric generator.

Producers Price Index: Formerly known as the wholesale price index, this index is the oldest continuous statistical series published by BLS. It is designed to measure average changes in prices of all commodities, at all stages of processing, produced or imported for sale in primary markets in the U.S.

Revenue, Average: Revenue from the sale of electricity (exclusive or forfeited discounts and penalties) for a particular class of service divided by the corresponding number of kilowatthours sold.

Utility Plant, Electric: All equipment used for the generation, transmission, and distribution of electricity, or an account in which record is kept of this equipment. Includes plant in service, purchased or sold, in process of reclassification, leased to others, held for future use, and under construction, and acquisition adjustments and adjustment accounts, without deduction of Accumulated Provision for Depreciation and Amortization.

MAJOR GEOGRAPHIC DIVISIONS AS REPORTED BY THE EDISON ELECTRIC INSTITUTE IN ITS WEEKLY RELEASE OF ELECTRIC OUTPUT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WYOMING
UTAH
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ROCKY MOUNTAIN 5%
PACIFIC SOUTHWEST 8%
ARIZONA
NEW MEXICO
NORTH DAKOTA
MINNESOTA
SOUTH DAKOTA
WEST CENTRAL 7%
IOWA
NEBRASKA
MISSOURI
KANSAS
TEXAS
OKLAHOMA
ARKANSAS
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ILLINOIS
MICHIGAN
INDIANA
OHIO
CENTRAL INDUSTRIAL 21%
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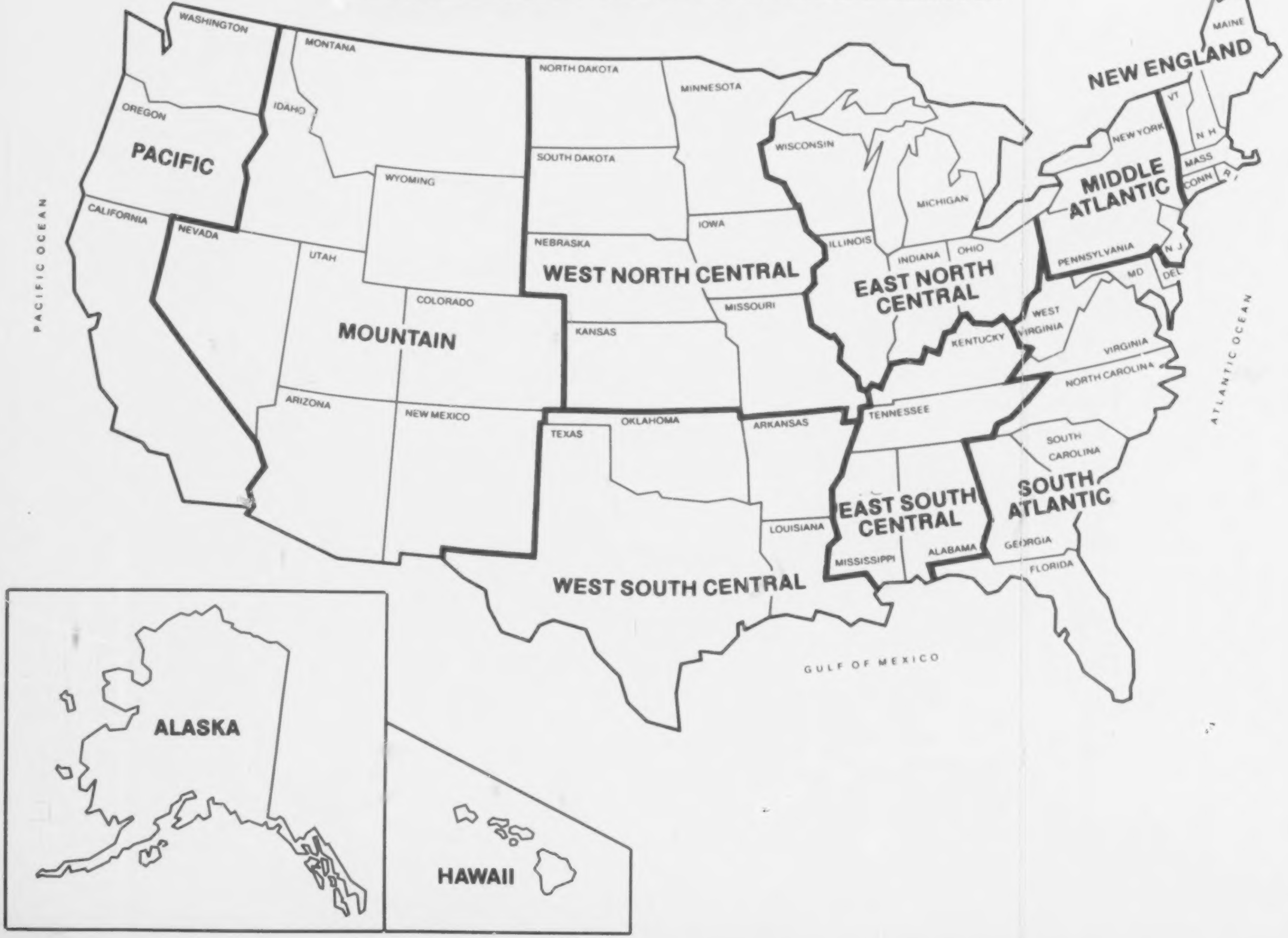
WEST VIRGINIA
PENNSYLVANIA
NEW YORK
MIDDLE ATLANTIC 14%
MD
DEL
N J
NEW ENGLAND 4%
MAINE
VT
N H
MASS
CONN
R I
VIRGINIA
NORTH CAROLINA
TENNESSEE
SOUTH CAROLINA
SOUTHEAST 23%
ALABAMA
GEORGIA
FLORIDA
ATLANTIC OCEAN
GULF OF MEXICO

Percentages represent net electric energy generated, plus energy received from others, less energy delivered for resale in each region for the 52 weeks ended December 26, 1987.

BUREAU OF CENSUS GEOGRAPHIC DIVISIONS AS REPORTED IN THE EDISON ELECTRIC INSTITUTE *STATISTICAL YEARBOOK*



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WYOMING
NEVADA
UTAH
COLORADO
ARIZONA
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MOUNTAIN
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
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WEST NORTH CENTRAL
OKLAHOMA
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